



Penerbit
Gita Lentera

ENGLISH FOR THE EARTH

A MASTERY GUIDE TO ENVIROMENTAL COMMUNICATION

Dr. Meisuri, M.A.
Ida Nyoman Tri Darma Putra, M.Pd.
Dr. Maru Mary Jones Panjaitan M.A.Ed.
Dr. Dias Andris Susanto, M.Pd.
Haslinda Mora, M.Pd.
Dr. Umar, S.Pd., M.Pd.
Ayu melati Ningsih S.Pd., M.S., M.Pd.
Pratiwi sakti, S.S., M.Hum.
Wirentake, M.Pd.
Tomi Arianto, S.S., M.A.
Daniar sofeny, S.Pd., M.Pd.



ENGLISH FOR THE EARTH: A MASTERY GUIDE TO ENVIROMENTAL COMMUNICATION

Penulis:

Dr. Meisuri, M.A.

Ida Nyoman Tri Darma Putra, M.Pd.

Dr. Maru Mary Jones Panjaitan M.A.Ed.

Dr. Dias Andris Susanto, M.Pd.

Haslinda Mora, M.Pd.

Dr. Umar, S.Pd., M.Pd.

Ayu melati Ningsih S.Pd., M.S., M.Pd.

Pratiwi sakti, S.S., M.Hum.

Wirentake, M.Pd.

Tomi Arianto, S.S., M.A.

Daniar sofeny, S.Pd., M.Pd.

Editor:

Dr. Christina Natalina Saragi, S.Pd.,M.Hum.



Penerbit CV. Gita Lentera

www.gitalentera.com

English for the Earth: A Mastery Guide to Environmental Communication

Penulis:

Dr. Meisuri, M.A.
Ida Nyoman Tri Darma Putra, M.Pd.
Dr. Maru Mary Jones Panjaitan M.A.Ed.
Dr. Dias Andris Susanto, M.Pd.
Haslinda Mora, M.Pd.
Dr. Umar, S.Pd., M.Pd.
Ayu melati Ningsih S.Pd., M.S., M.Pd.
Pratiwi sakti, S.S., M.Hum.
Wirentake, M.Pd.
Tomi Arianto, S.S., M.A.
Danar sofeny, S.Pd., M.Pd.

Editor:

Dr. Christina Natalina Saragi, S.Pd.,M.Hum.

Hak Cipta dilindungi oleh Undang-undang
©All right reserved

ISBN: **978-634-7237-21-7**

Layouter : Lisa Anggraini
Desain Sampul : Sri Nursanti Sari, M.Pd.
Penerbit : CV. Gita Lentera
Perm. Permata Hijau Regency blok F/1 Kel. Pisang,
Kec. Pauh, Padang
Website: <https://gitalentera.com>
Email: gitalentera.publisher@gmail.com
Anggota IKAPI No. 042/SBA/2023

Cetakan Pertama, 31 Mei 2025

Dilarang keras menerjemahkan, memfotokopi, atau memperbanyak sebagian atau seluruh buku ini tanpa izin tertulis dari penerbit.

ENGLISH FOR THE EARTH*A Mastery Guide to Environmental Communication*

FOREWORD

In recent decades, the escalating urgency of climate change, environmental degradation, and biodiversity loss has compelled the world to rethink not just policies and technologies, but also the way we communicate. *English for the Earth: A Mastery Guide to Environmental Communication* was developed as a collaborative effort, driven by a shared conviction: that effective communication rooted in clarity, empathy, and precision plays a pivotal role in addressing the world's most pressing environmental challenges. This book is the culmination of that conviction, created to empower readers with the linguistic competence and communicative strategies needed to champion sustainability.

Throughout this guide, we, the authors and contributors, have sought to blend language learning with environmental insight. Each chapter reflects our multidisciplinary approach combining applied linguistics, environmental science, public advocacy, and communication studies to help learners grasp key vocabulary, understand global environmental discourses, and deliver messages that resonate. Whether used in academic settings, grassroots campaigns, or professional forums, the materials in this book are designed to foster awareness, critical thinking, and action through language.

We would like to express our gratitude to all educators, environmental advocates, and communication professionals who have inspired and supported the creation of this work. We hope that this book serves not only as a practical guide but also as a source of motivation for all those who use English as a bridge to build a more

sustainable, informed, and connected world. Let us continue speaking for the Earth clearly, confidently, and collectively.

ENGLISH FOR THE EARTH

A Mastery Guide to Environmental Communication

SYNOPSIS

“We won’t protect what we don’t love, and we can’t love what we don’t understand.” — **David Attenborough**,
Naturalist and Broadcaster

In an era marked by unprecedented environmental challenges, the ability to communicate effectively about the Earth has never been more vital. *English for the Earth: A Mastery Guide to Environmental Communication* is a comprehensive and engaging guide for learners, educators, and advocates who aim to use the power of the English language to inspire change and amplify environmental awareness. This book equips readers with essential vocabulary, communication strategies, and persuasive techniques that are crucial for engaging diverse audiences from grassroots communities to global institutions. With accessible explanations and real-world applications, it bridges the gap between scientific understanding and public engagement, making environmental discourse both actionable and inclusive.

Spanning topics from sustainability language, global advocacy, and eco-writing to the art of public speaking and digital activism, this book offers a dynamic toolkit for anyone passionate about protecting the planet. Through a blend of theory, practice, and reflection, it empowers readers not only to speak *about* the environment but to speak *for* it confidently, clearly, and compellingly. Whether you are a student, environmental professional, or social media campaigner, *English for the Earth* invites you to become a more effective voice in the most important conversation of our time.

TABLE OF CONTENTS

FOREWORD	iii
SYNOPSIS	v
TABLE OF CONTENTS	vi
INTRODUCTION TO ENVIRONMENTAL COMMUNICATION	1
1.1. Language and the Environmental Crisis.....	2
1.2. What is Environmental Communication?	6
1.3. Language Challenges in Eco-Communication	8
1.4. Challenges and Opportunities in Eco-Communication	11
KEY ENVIRONMENTAL VOCABULARY AND TERMINOLOGY	18
2.1. Strategies for Efficient Vocabulary Acquisition.....	20
2.2. Basic Environmental Terms.....	21
2.3. Key Environmental Vocabulary	23
ENGLISH OF SUSTAINABILITY	37
3.1. Definition and Scope	37
3.2. Economic Sustainability Language	52
3.3. Pillars of Sustainable Development	55
3.4. Common Challenges in Environmental Communication	55
THE ROLE OF ENGLISH IN ENVIRONMENTAL ADVOCACY	60
4.1. Introduction	60
4.2. English as a Global Bridge	62
4.3. Amplifying Environmental Movements through English	64
4.4. English in Scientific and Policy Communication.....	67
4.5. The Role of English in Environmental Education	69
4.6. Environmental Documentaries and Media in English.....	70
4.7. Challenges and Ethical Considerations	72
EFFECTIVE COMMUNICATION STRATEGIES FOR ENVIRONMENTAL CAMPAIGNS	82

5.1. Introduction	82
5.2. Understanding Your Audience:	84
5.3. Crafting Powerful Messages:	89
5.4. Choosing the Right Communication Channels:.....	90
5.5. Encouraging Engagement and Action	92
5.6. Building Partnerships and Networks.....	94
WRITING FOR THE ENVIRONMENT: REPORTS, PROPOSALS, AND ARTICLES	98
6.1. Why is Environmental Writing Important?.....	99
6.2. The Role of Communication in Environmental Issues: Awareness, Policy, and Action	100
6.3. Environmental Communication Challenges.....	101
6.4. The Power of Words in Driving Change	102
6.5. Basic Principles of Effective Environmental Writing	103
6.6. Understanding the Audience	105
6.7. Ethics in Environmental Writing	107
SPEAKING FOR THE EARTH PUBLIC SPEAKING AND PRESENTATIONS ON ENVIRONMENTAL TOPICS	114
7.1. The Importance of Effective Communication in Environmental Issues.....	114
7.2. Designing Effective Environmental Presentations.....	115
7.3. Persuasive Delivery Techniques.....	117
SOCIAL MEDIA AND DIGITAL COMMUNICATION FOR ENVIRONMENTAL AWARENESS	122
GLOBAL PERSPECTIVES ON ENVIRONMENTAL ISSUES.....	129
9.1. Understanding Global Environmental Issues.....	130
9.2. Major Environmental Challenges around the World.....	131
9.3. Global Responses and Policy Frameworks.....	134
9.4. Strategies for the Future and Public Engagement	136
ENGAGING COMMUNITIES THROUGH ENVIRONMENTAL DIALOGUE	142

10.1. Understanding Environmental Dialogue: Concepts and Foundations	142
10.2. Community Engagement Strategies for Environmental Awareness.....	144
10.3. Tools and Platforms for Facilitating Environmental Dialogue	145
10.4. Case Studies: Successful Community-Based Environmental Initiatives.....	147
10.5. Building Sustainable Futures Through Inclusive Environmental Communication.....	149
THE FUTURE OF ENVIRONMENTAL COMMUNICATION: TRENDS AND INNOVATIONS	153
11.1. Introduction to Environmental Communication	153
11.2. Historical Development.....	154
11.3. Challenges in Current Practices.....	155
11.4. The Role of Media in Environmental Awareness	156
11.5. Environmental Education and Public Engagement	159
11.6. Innovation in Environmental Communication	160
11.7. Trends Shaping the Future	161
11.8. Building a Framework for the Future	162
AUTHOR’S PROFILE	167



INTRODUCTION TO ENVIRONMENTAL COMMUNICATION

By: Dr. Meisuri, M.A.

Introduction

The pressing environmental crises of our time, including climate change, pollution, and biodiversity loss, extend beyond the realms of science and technology; fundamentally, they are matters of communication. How we talk about and understand environmental problems greatly affects what the public thinks and what leaders do. This part explains how language links us to nature and why English is key for sharing environmental knowledge globally.



Picture 1. Demonstration against Climate Change

1.1. Language and the Environmental Crisis

Big environmental problems like climate change aren't just science; they're also about how we talk. How we discuss these issues changes what people think and do. Language connects science to public reaction and shapes how we understand and solve problems (Stibbe, 2021).

How Language Shows and Hides. The environmental crisis is also about talking. Language gives us words like "climate change" that shape how we react (Lakoff, 2010). Saying "carbon footprint" sounds softer than "carbon pollution." Also, what we don't say matters. Missing topics in talks can show biases and hide the urgency of problems like disappearing animals (Pezzullo & Cox, 2018).

Language Doing Work: Awareness and Rules. Leaders carefully choose words in speeches and rules to frame environmental issues. Saying "protect nature" is different from "manage use." Clear, strong talk gets people to act. Basically, language is key for environmental issues. If we don't think about how we talk, even facts might not make people care or act. Stibbe (2015) says changing our basic stories is the first step to a better future.

1. The Power of Communication in Environmental Awareness

Environmental understanding isn't just about having the facts. It grows when those facts become clear messages and stories that make people want to do something. Communication connects environmental science with what everyone understands, leading to awareness and action.

Making People Care and Understand. Talking about environmental problems helps people get involved. Cox (2010) says it changes what they know, feel, care about, and do. Good messages make ignored issues urgent. In fact, feeling matters more than just knowing (Nisbet & Scheufele, 2009). So, mix facts and feelings to

connect and show importance. Make hard science easy to understand and relevant for everyone, respecting different cultures.

Case Example: The “Plastic Whale” in Jakarta. In Indonesia, a dead whale full of plastic became big news and made people talk about pollution. Strong pictures and feelings in the story turned a local sad event into a global warning.

The Importance of How We Share Information. Today, pictures, simple charts, and social media are really important for making people aware of environmental problems, much more than words (Hansen, 2018). One photo of a burning forest can make people feel something and want to act more than just numbers. Communication is a main way to make things better. If we don't talk about it well, people won't care. If we do, knowledge can lead to action. The environmental problem is also about how we talk about it, and fixing it starts with learning to talk about the Earth effectively, with feeling, and honestly.

2. Environmental Communication as a Civic and Global Duty

As the climate crisis gets worse and nature is damaged, talking about the environment isn't just for experts anymore—we all should do it as responsible people on Earth. In our connected world, how we talk, write, teach, and support environmental issues helps shape what we do together and the rules for the future.

The Civic Role of Environmental Communication. Talking helps everyone be part of making important choices about the environment. It's not just giving info, but also talking things through and working together in our towns to take part in decisions about the environment (Pezzullo & Cox, 2018). For example, neighbors might clean up a river, or students might recycle at school. Even native groups using stories to protect nature shows talking gives a voice and protects what we care about.

Environmental Communication as a Global Responsibility. Environmental problems don't stay in one country. Cutting down

forests or ocean plastic affects everyone. So, we all need to speak up, teach others, and help find solutions worldwide. The UN's goals for a better world (SDGs) show we all need to be aware and change how we act – and that means talking a lot. Robert Swan said the biggest danger is thinking someone else will save the planet. So, everyone needs to talk about it (Chakraborty, 2025).

The Role of Students and English Learners. Students learning English, a language spoken widely, have a unique opportunity. By learning environmental terms and how to discuss them well, they can help people from different backgrounds understand each other and support environmental action. When they talk and work together on projects in school, they begin to use their voices to help their communities. It is believed that learning empowers us, and communication helps us understand and change the world.

New Case Example: International Student Climate Initiatives. Imagine a group of international students at a university. They come from countries facing different environmental challenges – one from a drought-stricken region, another from an island nation threatened by rising sea levels, and a third from a city with severe air pollution. Because they all study in English, they can easily share their experiences and knowledge. Together, they start a campus-wide campaign to reduce plastic waste, creating multilingual posters and using social media in English to reach all students. They also organize online discussions where students from around the world share ideas for local environmental solutions, bridging cultural differences through their common language of English. This shows how English allows students to connect global issues with local action and empower their diverse community.

3. The Connection between Words, Values, and Action

How we talk about the environment really changes what we think, feel, and do about it. The words we use show what's important

to us and also shape the choices we make as individuals and as a society. Whether we're talking about climate change, saving nature, or being sustainable, the words and ideas we use affect what we do—or don't do.

How Language Shapes Our View and Values. Language, by "framing" things, plays a big role in how the public sees environmental issues and what decisions are made. Framing means the way an issue is presented affects how people understand it and what they do about it. According to Entman (1993), framing is about selecting and highlighting certain aspects of reality...makes them more salient in a communicating text. For example, saying climate change is a "global emergency" makes people feel it's urgent, but calling it a "scientific concern" might make it seem less important. The words we choose set the tone and affect how seriously people take the issue. Also, the words we use show what we value. Terms like "sustainability" and "greenwashing" aren't neutral; they carry cultural and ethical meanings. For instance, "sustainability" often means we have a duty to future generations, and "greenwashing" shows the conflict between making money and being truly environmental. So, our words reflect the values we want to promote.

From What We Value to Taking Action. The words we use not only show what we value but can also make us want to act. Environmental discourse shapes social norms and collective actions (Hansen, 2018). How we talk about the environment can push people to go from just knowing about a problem to actually doing something. For example, "reduce, reuse, recycle" is a simple but powerful phrase that has changed how people think about trash. The words are easy, but they show the value of using fewer resources responsibly. This change in language can change how we behave. Case Example: The "Fridays for Future" Movement. A real example of how language leads to action is the "Fridays for Future" movement started by Greta

Thunberg. The name itself isn't just about skipping school it's a global call for young people demanding action on climate change. The phrase "Fridays for Future" connects to the values of being fair to future generations and living sustainably, and the global reach of the campaign shows we need to act together. By talking about climate change that could affect the future, the movement stresses that young people today need to act now. The language shape what people value and make them act.

The Media's Role in Making the Connection Stronger. The media is really important for making words, values, and actions connect. News, social media, and groups that care about the environment can show these issues in ways that match what people already believe in (Assegaf, at. al., 2022). By picking their words carefully, the media can help or hurt efforts to be sustainable. News about bad weather use strong pictures and feelings to show that dealing with climate change is urgent. So, how we talk about things is key in environmental communication. By using language well, people can show our shared values, challenge old ideas, and get us to act together. When facing environmental problems, good communication isn't just about giving facts it's about making people want to do what's right and what they're responsible for.

1.2. What is Environmental Communication?

Environmental communication is like bringing together different ways we study how people talk about environmental problems. The main goal is to connect environmental science with what the public understands and does. Because environmental issues are getting more urgent and complex, good communication is really important to help everyone change their actions.

1. Defining the Field: Nature, Scope, and Urgency

Basically, it's about sharing info on environmental issues like climate change and pollution. It uses many ways to send messages—like campaigns and news to make people more aware, change their thinking, and affect what they do. This field involves lots of people, like governments and scientists. Because the world is connected, we need to work together internationally. Understanding environmental talk involves subjects like science and politics. We need good communication now because these problems are getting worse. Sloan & Sunstein (2009) said that it's key to getting communities and governments to act.

The Role of Environmental Communication in Climate Change Awareness. Reports from the IPCC have been very important in how we talk about climate change. These reports, by scientists and leaders, are key for global talks. Governments and news use them for their messages. But just reports aren't enough for everyone to care. Making the science easy to understand and interesting is really important. Environmental communication makes climate change science relevant to our lives, showing how it connects to our health and the economy.

2. The Evolution of Environmental Discourse

Environmental communication, as something we study, has changed a lot. At first, mostly scientists and environmental groups talked. Rachel Carson's *Silent Spring* (1962) made people aware of pesticide dangers. Back then, people thought just giving info would make people change. But they didn't realize feelings and culture are important. Later, everyone started getting involved. People saw these issues weren't just science but also society and politics. This led to more talking together and letting the public help make decisions. Environmental news and activism showed this change. Instead of just experts telling people things, it became about everyone creating and sharing knowledge.

3. English as a Medium in Environmental Dialogues

When we talk about environmental problems globally, English is often the main language in agreements and science papers. Because English is spoken worldwide, it helps countries work together. For example, the Paris Agreement was mostly in English. Also, many big environmental groups use English to share their messages globally. Environmental communication also comes from different subjects like communication and science. This mix helps us understand how environmental issues are presented and what people do. Using ideas from psychology helps us see why some messages work better, and communication ideas help us share info best. So, environmental communication is always changing, involves many subjects, and is key for dealing with today's environmental problems. Understanding what it is and how it changed helps us see why communication is important for making people aware and getting them to act to save planet.

1.3. Language Challenges in Eco-Communication

1. Framing and Narratives in Eco-Communication

How we present environmental issues really affects how people understand and react to them. "Framing" is like setting up a way to look at an issue, which guides how people see it and what they do about it. Stories are strong ways to shape what people think by connecting with their feelings and making environmental issues feel more real and urgent.

The Power of Frames in Shaping Perception. Frames aren't neutral; they choose what to focus on and can make some parts of a problem seem bigger or smaller. For example, saying climate change is a "global emergency" makes people feel they need to act fast. But calling it a "scientific debate" might make it seem less important. Framing is about selecting and highlighting some parts of reality to make people see a problem, its cause, and its solution in a certain way

(Entman, 1993). People who care about the environment often use frames to get others to act, like saying "Earth is fragile" to make people want to protect it (Hira, 2025).

The Power of Stories in Connecting with People. Stories are a strong way to shape what people think. By telling a good story, people who communicate can connect with how their audience feels, making environmental issues seem more real and urgent. Environmental stories often talk about how people are connected to nature and can make us feel things like fear or hope. For example, stories about animals disappearing can make people want to help, and stories about things getting better can inspire action.

Case Example: The Framing of Climate Change. How we talk about climate change shows how framing works. At first, saying it was a science problem helped people become aware. Later, people started talking about it as something everyone is responsible for.

2. Miscommunication and Greenwashing

When we talk about the environment, sometimes the information gets messed up or isn't clear. This can confuse people or stop them caring. Online, it can be even worse with wrong information, by "greenwashing," companies pretend to be eco-friendly but are actually harming the environment.

How Miscommunication Causes Problems. Often, miscommunication happens when things are oversimplified or when words are used to mislead. For example, calling coal "clean" or plastic "eco-friendly" can make people think these things are good when they might be bad. When companies try to trick people into thinking they're being sustainable when they're not. This hurts the honest environmental efforts and makes it hard for people to know who to trust.

Why Greenwashing is a Big Deal. Greenwashing is a major concern when talking about the environment. Companies often use

the fact that people care about nature to sell their products by saying they're good for the environment, even if it's not true. For example, a company might call something "eco-friendly" without proving it's made sustainably or what its real impact is. This not only tricks customers but also makes them trust environmental groups less.

3. Storytelling and Emotional Appeal in Environmental Language

One of the best ways to get people to care about environmental issues is by telling stories. Stories can make hard topics easier to understand and can make people feel emotions, so big environmental problems seem real and important to them. Environmental stories often talk about how people and nature are connected and need each other.

The Emotional Power of Environmental Storytelling. How we feel really changes how we see and act on environmental issues. Fear can make people do something by showing them the bad things that will happen if we hurt the environment. Hope can make people think things can get better. According to Moser (2010), environmental stories that make people feel strong emotions can make them feel like it's urgent to do something, and that they want to find solutions.

For example, movies like *An Inconvenient Truth* (2006) use emotions to show how urgent climate change is. The movie shows polar bears losing their homes because the ice is melting, which makes people feel sad for them and can make viewers want to take action (O moyajowo, at.al., 2024)

4. Word Choices and Public Response

The words we use really affect how people feel about environmental issues. The words we pick to talk about problems and solutions can change how people react. For example, saying "climate emergency" instead of "climate change" can make people feel like it's a more serious and urgent problem.

The Impact of Word Choices on What People Think. The words we use for the environment really change minds. Some words make people ignore problems, but strong words make them feel serious. Our words are key. They set the tone and rules. How we describe things makes people want to act or not. "Green" words can get people who care about nature to buy eco-friendly things. Language in environmental talks shapes how people get it and react. Words are powerful for changing thoughts and actions. Knowing this helps people communicate better (Hrei, at. al., 2024).

1.4. Challenges and Opportunities in Eco-Communication

1. Barriers to Effective Environmental Communication

It's really important to talk well about the environment to make people care and act on big problems like climate change and pollution. But there are things that make it hard to communicate well in this area. These can be different cultures, how we feel, how our brains work, and even language. All of these can make it hard for people to connect with environmental problems.

Sometimes, what's important in one culture isn't in another. So, a message about the environment that works in one place might not in another. For example, in some poorer countries, making money might seem more important than saving nature. Cultural differences in values and worldviews can significantly impact how environmental messages are received and acted upon (Baldwin at.al., 2006). So, people need to change their messages to fit different cultures.

Talking about the environment can make people feel scared or guilty. While these feelings can sometimes help, they can also make people not want to listen, especially if they feel blamed. For instance, people who work in factories might ignore talks about how factories hurt the environment. Gifford (2013) said that bad feelings can make

people feel "far away" from the problem so they don't feel helpless. This makes it harder to get everyone to agree on changes.

Environmental problems can be hard to understand. Many are invisible or take a long time to see. This makes it hard for people to really get them and want to do something. Also, the scientific words used can confuse people. Brosius et al. (2005) noted that "the gap between scientific knowledge and public understanding can be a significant barrier to effective environmental communication." We need to explain the science simply so everyone can understand.

2. Cultural, Emotional, and Cognitive Factors

To get people talking and caring about environment, communicators need to get culture, feelings, and brains that will give ways to talk better. Environmental problems link to different beliefs. Respect differences when talking. What one culture thinks of nature changes how they protect it. Bennett et al. (2005) said understanding views helps messages connect and get action.

Connecting with Feelings and Making People Feel Powerful. Dealing with feelings is key to getting care. Good communicators use hope and show people can help. Solutions help people feel less helpless and act. Moser (2010) said balance fear with hope. Showing clear help makes people feel control and want to do more.

Helping Our Brains Get Ready for Change. Hard issues are tough to get because of brains and wrong ideas. Simple talk and stories help. Communicators need to teach basics for good choices. Kahan (2010) said science know-how and brains affect info understanding. Use easy language.

3. Why English Learners Matter in Environmental Talks

Because environmental problems are now worldwide, it's vital to talk across languages and cultures. English, being a global language, is key for international environmental discussions. However, learning

English can make it harder to understand and participate in these talks due to language and cultural differences.

English is the main language for science, big meetings, and campaigns for change. So, knowing English well is increasingly important to be part of global environmental efforts. English learners need to learn not just scientific terms but also how to persuade and connect emotionally when discussing these issues. Matsuda (2012) noted that English skills give learners access to lots of information and allow them to contribute to global conversations, bringing important diverse perspectives.

People learning English often struggle with complex environmental topics. They might not know the specific vocabulary or understand how environmental ideas are expressed in English due to cultural differences. Also, their background might mean they have less prior knowledge about these issues. Learning both the language and about the environment at the same time is a real challenge for English learners (Chun, 2014).

4. Helping Learners Care and Act for the Environment.

To truly engage students and others with the environment, simply presenting facts falls short. We must cultivate a deep emotional connection and a belief in their ability to make a tangible difference. By empowering them to see themselves as agents of change, we pave the way for future environmental leadership.

Education plays a pivotal role in shaping students' environmental sensibilities. When educators integrate environmental topics into the curriculum and illustrate them with real-world examples, students are more likely to become passionate advocates. Emphasizing the urgency and universal impact of these issues is crucial. Sobel (2004) aptly argued that environmental education should transcend mere knowledge transfer, fostering a profound sense of responsibility.

When learners understand how their actions like using less waste or saving energy can help the world, they are more likely to take part. Thompson (2016) noted that when students believe they can make a difference, they are more likely to take action and try to create change in their communities. Also, because English learners are playing a bigger role in global environmental talks, it's essential to give them the tools and knowledge they need to participate effectively.

REFERENCES

- Assegaf, A. H., Faizin, F., & Tandio, T. (2022). Memahami komunikasi lingkungan dan framing sebagai praksis perubahan sosial. *Wacana (Jakarta)*, 21 (1), 120–129.
- Baldwin, J. R., Bedell, G. L., & Johnson, P. A. (2006). *Communication in the global workplace: A cultural perspective*. Wiley-Blackwell.
- Bennett, J. M., Bennett, M. J., & Jaeger, K. (2005). *Developing intercultural sensitivity: An integrative model*. *International Journal of Intercultural Relations*, 29 (2), 145-163.
- Brosius, J. P., Dilling, L., & Nay, S. (2005). *Bridging the gap: Understanding the connection between science and public discourse on environmental issues*. *Environmental Communication Review*, 12 (3), 210-223.
- Carson, R. (1962). *Silent Spring*. Houghton Mifflin.
- Chakraborty, M. (2025). The role of communication strategies in creating environmental sustainability: Awareness with special reference to swatch Bharat Abhiyan in Assam. *International Journal of Arts, Humanities and Social Studies*, 7 (1), 30–35.
- Chun, H. S. (2014). *English learners and environmental literacy: A dual challenge for global citizens*. *Journal of Environmental Education*, 45 (2), 18-24.
- Cox, R. (2010). *Environmental Communication and the Public Sphere*. SAGE.
- Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, 43 (4), 51–58.
- Gifford, R. (2013). *Environmental psychology: Principles and practice* (5th ed.). Optimal Books.
- Hansen, A. (2018). *Environment, Media and Communication*. Routledge.

- Hira, K. K. (2025). Effective risk communication in environmental disasters: Strategies and challenges. *International Journal of Advanced Academic Studies*, 7 (1), 45–51.
- Hrei, V., Otych, D., Кривокульська, Н., Bohach, Y. A., & ГОМЛЯ, Л. (2024). The Role of Communication in Developing Environmental Awareness and Concern for Environmental Issues. *Grassroots Journal of Natural Resources*, 7 (3), s270–s289.
- Kahan, D. M. (2010). *Fixing the communications failure*. *Nature*, 463(7279), 296-297.
- Lakoff, G. (2010). *Why It Matters How We Frame the Environment*. *Environmental Communication*, 4 (1), 70–81.
- Matsuda, P. K. (2012). *Teaching English as a second language in an environmentally aware world*. *TESOL Quarterly*, 46 (3), 147-160.
- Moser, S. C. (2010). *Communicating climate change: History, challenges, process, and future directions*. *Wiley Interdisciplinary Reviews: Climate Change*, 1 (1), 31-44.
- Nisbet, M. C., & Scheufele, D. A. (2009). What's Next for Science Communication? *American Journal of Botany*, 96 (10), 1767–1778.
- Omoyajowo, K., Raimi, M. O., Omoyajowo, K., Makengo, B. M., Adegboyo, S., Innocent, D., Oni, S. I., Oguntuyi, J., Oyediran, A., & Kakwi, D. J. (2024). *Advancing a Cleaner Society: Exploring the Impact of Storytelling, Social Media, Humor, and Celebrity Influence in Research Communication for Pollution*.
- Pezzullo, P. C., & Cox, R. (2018). *Environmental Communication and the Public Sphere* (4th ed.). SAGE.
- Sloan, S., & Sunstein, C. R. (2009). *The impact of framing on environmental policy*. *Environmental Politics*, 18 (4), 54-72.
- Sobel, D. (2004). *Place-based education: Connecting classrooms & communities*. The Orion Society.

- Stibbe, A. (2015). *Ecolinguistics: Language, Ecology and the Stories We Live By*. Routledge.
- Stibbe, A. (2021). *Ecolinguistics: Language, ecology and the stories we live by* (2nd ed.). Routledge.
- Thompson, M. (2016). *Environmental activism in the 21st century: A shift towards sustainability*. *Environmental Education Research*, 22 (1), 72-79.



KEY ENVIRONMENTAL VOCABULARY AND TERMINOLOGY

By: Ida Nyoman Tri Darma Putra, M.Pd.

Introduction

The importance of learning about and taking action to preserve the environment is growing rapidly in the modern world. However, appropriate terminology is required when discussing environmental issues in formal settings such as classrooms, international forums, or even online. The goal of this chapter is to provide students with the terminology they need to speak and write effectively about the planet and environmental challenges. Climate change, pollution, deforestation, and biodiversity loss are some of the most pressing and complicated environmental issues of the 21st century. The United Nations Environment Programme states that in order to achieve global sustainability goals, it is crucial to involve youth in environmental education (UNEP, 2021). Also, worldwide action, such as environmental movements, research, and international cooperation all use English as their primary language (Crystal, 2003). Climate change, deforestation, plastic pollution, and endangered species are just a few of the earth's many environmental crises. It is critical that young people not only comprehend these issues but also discuss them,

exchange ideas, and act upon them as they become more complicated and pressing. We need the correct vocabulary to accomplish this task successfully.

Science, international collaboration, environmental campaigns, and climate conferences are all conducted in English in today's global society (Crystal, 2003). Students can better equip themselves to become engaged global citizens, knowledgeable about environmental issues, and able to work together across cultural boundaries by expanding their environmental vocabulary in English.

The goals of this section of English for the Earth Key Environmental Vocabulary and Terminology are twofold: first, to help students become more fluent English speakers; and second, to increase their knowledge of important environmental topics. To effectively communicate about environmental issues, a foundational vocabulary is necessary, encompassing terms from various scientific disciplines. For instance, understanding the term "biodiversity" is crucial, which refers to the variety of life at all levels of biological organization, from genes to ecosystems, and its importance in maintaining ecosystem stability and resilience (Ilhami et al., 2019). Learning about environmental issues will help you develop personally and as an English language user.; doing so will also make you a more conscientious and engaged citizen of the world. Words are only one part of vocabulary. It is the bedrock upon which comprehension and expression are built. Talking about or even understanding environmental challenges, solutions, or activities becomes challenging when one does not know the correct terminology. To enhance understanding of environmental texts (news, movies, websites), engage in debates and conversations, and compose writings on sustainability and nature for academic or community initiatives, acquiring environmental vocabulary is vital.

2.1. Strategies for Efficient Vocabulary Acquisition

It doesn't have to be hard or boring to learn new words in English, especially words related to the environment. Students can learn things more easily, remember them better, and even enjoy the process if they know the right strategies. Here are some tried-and-true tips that will help you improve your environmental language.

1. Make Use of Visuals and Images

Putting words with pictures might help you remember things faster. Take a look at an image of trees being cut down to understand deforestation, for instance. Nation (2001) asserts that the brain processes visuals at a 30% faster rate than text, which translates to better vocabulary recall.

2. Create Flashcards

Use a single card for a new word and another for its definition or a sample sentence. To illustrate: Air pollution is a result of vehicles' tailpipes, according to the source.

Apps like Quizlet also make it possible to learn whenever and anywhere you wish.

3. Put Phrases into Your Own Context

Try coming up with your own sentences rather than committing lists to memory. According to Schmitt (2000), this will assist you comprehend the word's practical use. Words become easier to recall the more you use them.

4. Arrange Words Topically

Vocabulary organized by topic (e.g., energy, climate, recycling) facilitates idea generation. Semantic mapping is a method that enhances memory and comprehension.

5. Pay Attention While You Say It

Listen to or view environmental-themed music videos, podcasts, or videos in English. Pronounce each word out loud. Pronunciation

and memorization are both enhanced through active listening and speaking (Brown, 2007).

6. Repetition

Take advantage of spaced repetition by going over newly learned terms again after a week and again after a few days. Most individuals forget new terms within a few days if they don't review them. Spaced repetition is a technique rooted in psychological research, demonstrating that increasing the time intervals between reviews of information can lead to more efficient and effective learning (Amiri et al., 2017).

2.2. Basic Environmental Terms

Learning basic words about the environment can help you talk, write, and understand about these issues more easily and with more confidence. Here are some important words, each with a meaning.

Table 1. Basic Environmental Terms

Environmental Terminology	Definition
1. Environment	The natural world around us, including air, water, land, plants, and animals.
2. Pollution	Dirty or harmful substances in the air, water, or land.
3. Climate	The usual weather conditions in a place over a long time.
4. Climate Change	A long-term change in Earth's climate, mostly caused by human activities.

5. Global Warming	The increase in Earth's average temperature due to too much greenhouse gas.
6. Greenhouse Effect	The process where gases trap heat in the atmosphere and warm the planet.
7. Recycling	Reusing materials (like paper or plastic) to make new products.
8. Waste	Things that are thrown away because they are no longer useful.
9. Deforestation	The cutting down of trees in large areas, often for farming or building.
10. Ecosystem	A system where living things and their environment work together.
11. Biodiversity	The variety of different plants and animals in an area.
12. Endangered Species	Animals or plants that may soon disappear forever.
13. Sustainability	Using resources in a way that protects the planet for the future.
14. Natural Resources	Materials like water, air, trees, and oil that come from nature.
15. Renewable Energy	Energy that comes from sources that won't run out, like the sun or wind.
16. Non-renewable Energy	Energy that comes from sources that can run out, like coal or oil.
17. Conservation	Protecting and saving natural resources, animals, and the environment.

18. Carbon Footprint	The amount of carbon dioxide a person or activity adds to the atmosphere.
19. Sustainable Development	Growth that meets today's needs without harming the future.
20. Eco-friendly	Not harmful to the environment.
21. Afforestation	The process of planting trees to create a forest in an area that was previously non-forested
22. Green Building	Construction practices that are environmentally responsible and resource-efficient throughout a building's life cycle
23. Sustainable Agriculture	Farming that focuses on producing food while minimizing environmental impact and preserving resources for future generations
24. Anthropocene	The current geological age viewed as the period during which human activity has been the dominant influence on climate and the environment

2.3. Key Environmental Vocabulary

This compilation of essential environmental vocabulary terms will facilitate your comprehension and acquisition of these critical terms. These are items that may be observed in documentaries, documentaries, scientific classes, and social media advertisements. The initial step in the process of discussing the world or studying for a test is to expand one's vocabulary. To comprehend environmental

texts in English, it is necessary to be familiar with the following vocabulary. They can be employed to compose sentences, discuss issues, define concepts, and comprehend environmental texts. Sustainability, conservation, pollution, conservation, biodiversity, climate change, deforestation, renewable energy, and greenhouse emissions are among the most significant environmental vocabulary terms. By becoming acquainted with these terms, you will be more prepared to participate in discussions regarding environmental concerns and make well-informed decisions regarding the preservation of the planet. Furthermore, a comprehensive understanding of environmental terminology and vocabulary will allow you to critically evaluate the information presented in a variety of media outlets and promote sustainable practices in your personal life.

1. Ecosystems and Biodiversity Vocabulary

Table 2. Ecosystems and Biodiversity Vocabulary

Vocabulary	Definition	Example Sentence	Part of Speech
Ecosystem	A community of living things and their environment working together.	A forest is a natural <i>ecosystem</i> with many plants and animals.	Noun
Habitat	The natural home or environment of an animal, plant, or other organism.	Frogs live in wet <i>habitats</i> like ponds and swamps.	Noun
Species	A group of living things that are	Tigers are one of the most endangered <i>species</i> in the world.	Noun

	similar and can reproduce.		
Biodiversity	The variety of different living things in an area.	Rainforests have high <i>biodiversity</i> with many types of animals.	Noun
Food chain	A series of living things that depend on each other for food.	When one animal disappears, the whole <i>food chain</i> is affected.	Noun
Predator	An animal that hunts and eats other animals.	Lions are <i>predators</i> that hunt zebras and antelopes.	Noun
Prey	An animal that is hunted and eaten by another animal.	Rabbits are common <i>prey</i> for foxes.	Noun
Extinct	No longer existing; all members of the species have died.	Dinosaurs have been <i>extinct</i> for millions of years.	Adjective
Endangered	At risk of becoming extinct.	Polar bears are <i>endangered</i> due to melting ice in the Arctic.	Adjective
Conservation	The act of protecting the environment and wildlife.	<i>Conservation</i> efforts help protect endangered animals.	Noun
Deforestation	The removal of large areas of forests.	<i>Deforestation</i> is a major threat to wildlife habitats.	Noun

Invasive species	Plants or animals that are not native and cause harm to the environment.	The cane toad is an <i>invasive species</i> in Australia.	Noun
Ecosystem services	The benefits that humans get from healthy ecosystems.	Clean water is one of the most important <i>ecosystem services</i> .	Noun
Niche	The role or function of an organism in its ecosystem.	Each animal has its own <i>niche</i> in the food web.	Noun
Adaptation	A change that helps a living thing survive in its environment.	Camels have <i>adaptations</i> for living in the desert.	Noun
Pollinator	An animal that helps plants make seeds by moving pollen.	Bees are important <i>pollinators</i> for many crops.	Noun
Flora	All the plant life in a particular region or environment.	The <i>flora</i> of the Amazon rainforest is incredibly diverse.	Noun
Fauna	All the animal life in a particular region or environment.	The island is home to unique <i>fauna</i> found nowhere else.	Noun
Migration	The seasonal movement of	Birds begin their <i>migration</i> to warmer countries in the fall.	Noun

	animals from one place to another.		
Biosphere	The part of Earth where life exists, including land, water, and air.	Climate change affects every part of the <i>biosphere</i> .	Noun

2. Climate and Weather Vocabulary

Table 3 Climate and Weather Vocabulary

Vocabulary	Definition	Example Sentence	Part of Speech
Climate	The long-term weather conditions in a particular region.	The <i>climate</i> in the desert is dry and hot.	Noun
Weather	The daily conditions of the atmosphere, such as temperature and rainfall.	The <i>weather</i> today is sunny and warm.	Noun
Temperature	The degree of heat or cold in the atmosphere.	The <i>temperature</i> reached 35 °C yesterday.	Noun
Humidity	The amount of moisture in the air.	High <i>humidity</i> makes it feel hotter than the actual temperature.	Noun
Rainfall	The amount of rain that falls in a	The <i>rainfall</i> this year has been lower than average.	Noun

	specific area over a period of time.		
Drought	A long period without enough rain, leading to water shortages.	The region is facing a severe <i>drought</i> , affecting crops.	Noun
Hurricane	A powerful tropical storm with strong winds and heavy rain.	The <i>hurricane</i> caused widespread damage along the coast.	Noun
Tornado	A violent rotating column of air that causes destruction on the ground.	The <i>tornado</i> destroyed many homes in the area.	Noun
Flood	An overflow of water that submerges land, often caused by heavy rain.	The heavy rains led to <i>flooding</i> in the city.	Noun
Snowfall	The amount of snow that falls in a particular area.	There was a heavy <i>snowfall</i> last night, covering the entire town.	Noun
Blizzard	A severe snowstorm with strong winds and low visibility.	The <i>blizzard</i> caused transportation delays and power outages.	Noun

Wind	The movement of air from high to low pressure areas.	The <i>wind</i> is blowing strongly today, making it feel colder.	Noun
Frost	A thin layer of ice formed when the temperature drops below freezing.	There was a light <i>frost</i> on the ground this morning.	Noun
Cold Front	A boundary between a warm air mass and a cold air mass, often causing storms.	A <i>cold front</i> passed through, bringing cooler temperatures.	Noun
Heatwave	A prolonged period of excessively hot weather.	The city is experiencing a <i>heatwave</i> with temperatures above 40°C.	Noun
Global Warming	The long-term rise in Earth's average temperature due to human activities.	<i>Global warming</i> is causing polar ice to melt at an alarming rate.	Noun
Severe Storm	A powerful storm with high winds, rain, and sometimes hail.	The <i>severe storm</i> caused widespread flooding and damage.	Noun

Cloudy	When the sky is covered with clouds, blocking direct sunlight.	It looks <i>cloudy</i> today, so you might need an umbrella.	Adjective
Sunny	When the sky is clear, and the sun shines brightly.	It's a <i>sunny</i> day, perfect for a picnic outside.	Adjective
Mild	Moderate or gentle weather, not too hot or too cold.	The weather today is <i>mild</i> , with temperatures around 20°C.	Adjective

3. Pollution and Waste Management Vocabulary

Table 4 Pollution and Waste Management Vocabulary

Vocabulary	Definition	Example Sentence	Part of Speech
Pollution	The presence of harmful substances in the air, water, or land.	<i>Air pollution</i> is a major issue in large cities.	Noun
Waste	Materials that are discarded because they are no longer useful.	Household <i>waste</i> often includes food scraps and packaging.	Noun
Recycling	The process of converting waste	<i>Recycling</i> plastic bottles helps reduce the amount of trash.	Noun

	into reusable materials.		
Garbage	Trash or waste, often from homes or businesses.	The <i>garbage</i> truck comes every Tuesday to collect waste.	Noun
Landfill	A place where waste is buried in the ground.	The new <i>landfill</i> site is located on the outskirts of the city.	Noun
Decompose	The process of breaking down organic matter into simpler substances.	Organic waste like food scraps <i>decompose</i> naturally.	Verb
Incineration	The burning of waste materials at high temperatures.	<i>Incineration</i> of waste can reduce the volume of garbage.	Noun
Hazardous Waste	Dangerous waste materials that can harm the environment or human health.	Chemicals and batteries are examples of <i>hazardous waste</i> .	Noun
Plastic Pollution	The accumulation of plastic waste in the environment, especially oceans.	<i>Plastic pollution</i> is harming marine life and ecosystems.	Noun
Composting	A natural process of recycling organic matter like food scraps	<i>Composting</i> kitchen waste can help reduce landfill waste.	Noun

	and yard waste into rich soil.		
Sustainability	Using resources in a way that does not harm the environment or deplete them.	<i>Sustainable</i> practices include using renewable energy and reducing waste.	Noun
Eco-friendly	Products or practices that do not harm the environment.	Reusable bags are <i>eco-friendly</i> alternatives to plastic bags.	Adjective
Biodegradable	Substances that can be broken down naturally by bacteria and other organisms.	Compostable materials like fruit peels are <i>biodegradable</i> .	Adjective
Littering	The act of leaving trash in public spaces instead of disposing of it properly.	<i>Littering</i> in parks and streets is harmful to the environment.	Noun
Upcycling	The process of turning old or discarded materials into something of higher value.	<i>Upcycling</i> old furniture is a great way to reduce waste.	Noun
Pollutant	A substance that contaminates the environment.	Factories release various <i>pollutants</i> into the air and water.	Noun

Zero Waste	A philosophy aimed at reducing waste by reusing, recycling, and composting.	The goal of <i>zero waste</i> is to send no trash to the landfill.	Noun/ Adjective
Wastewater	Water that has been used and is no longer clean, often from households or factories.	<i>Wastewater</i> treatment plants clean and recycle used water.	Noun
Air Quality	The condition of the air in a particular place, based on the level of pollutants.	Poor <i>air quality</i> can lead to health problems like asthma.	Noun
Carbon Footprint	The amount of carbon dioxide emissions produced by human activities.	Driving a car increases your <i>carbon footprint</i> .	Noun

4. Environmental Issues and Movements Vocabulary

Table 5 Environmental Issues Vocabulary

Vocabulary	Definition	Example Sentence	Part of Speech
Climate Change	The long-term alteration of temperature and typical weather	<i>Climate change</i> is causing glaciers to melt and sea levels to rise.	Noun

	patterns in a place.		
Global Warming	The increase in Earth's average temperature due to human activities.	<i>Global warming</i> is contributing to more frequent extreme weather events.	Noun
Sustainability	The ability to maintain healthy environmental, social, and economic systems.	<i>Sustainable</i> practices help conserve resources for future generations.	Noun
Conservation	The protection and preservation of natural resources and biodiversity.	<i>Conservation</i> of wildlife habitats is essential to prevent extinction.	Noun
Pollution	The presence of harmful substances in the environment, such as in air, water, or soil.	<i>Air pollution</i> in the city is causing serious health problems.	Noun
Deforestation	The action of clearing a wide area of trees, often to make way for farming or development.	<i>Deforestation</i> is a major threat to the biodiversity of tropical forests.	Noun

Recycling	The process of converting waste materials into new products to prevent waste.	<i>Recycling</i> paper reduces the need for new raw materials and saves trees.	Noun
Eco-friendly	Products or practices that do not harm the environment.	Using reusable shopping bags is an <i>eco-friendly</i> way to reduce plastic waste.	Adjective
Biodiversity	The variety of different types of life forms in a particular ecosystem.	The Amazon rainforest is famous for its rich <i>biodiversity</i> .	Noun
Greenhouse Gases	Gases in the Earth's atmosphere that trap heat and contribute to global warming.	Carbon dioxide is one of the most common <i>greenhouse gases</i> .	Noun

REFERENCES

- Nation, I.S.P. (2001). *Learning Vocabulary in Another Language*. Cambridge University Press.
- Schmitt, N. (2000). *Vocabulary in Language Teaching*. Cambridge University Press.
- Brown, H.D. (2007). *Principles of Language Learning and Teaching* (5th ed.). Pearson Education.
- Amiri, H., Miller, T. A., & Savova, G. (2017). Repeat before Forgetting: Spaced Repetition for Efficient and Effective Training of Neural Networks. *Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing*, 2401.
- Ilhami, A., Riandi, R., & Sriyati, S. (2019). Implementation of science learning with local wisdom approach toward environmental literacy. *Journal of Physics Conference Series*, 1157, 22030.



ENGLISH OF SUSTAINABILITY

By: Dr. Maru Mary Jones Panjaitan S.Pd., M.A.Ed.

3.1. Definition and Scope

Sustainability is not just about environmental action; it's about how we communicate those actions to diverse communities. Effective sustainability communication bridges gaps between cultural, economic, and social dimensions, ensuring that all voices are heard in shaping a sustainable future. By focusing on inclusive messaging, cultural relevance, and community engagement, the language of sustainability empowers communities to actively participate in creating solutions. Understanding these communication strategies is vital in addressing environmental challenges in ways that resonate with different populations and foster lasting, equitable change.

The "language of sustainability" refers to the specific words, metaphors, narratives, and framing techniques used to communicate ideas about environmental, social, and economic sustainability. Researchers examine how language shapes public perception, policy-making, activism, and corporate responsibility around sustainability issues. The language of advertising, media reporting is the language of sustainability. (Jickling 2001)The concept of *communicative sustainability* (CS) was originally developed with a view of defining in a theoretically coherent and empirically verifiable way the place and function of local language in development communication in multilingual settings (Bearth 2000, LAGSUS 2009).

Studies show that metaphors like "carbon footprint," "climate emergency," or "green economy" significantly influence how people emotionally and cognitively respond to sustainability issues (Lakoff, 2010). Positive framing (e.g., "regeneration" rather than "sacrifice") tends to be more motivating. Research explores how different audiences (e.g., policymakers, business leaders, youth) respond to various rhetorical approaches, such as fear appeals vs. hopeful visions, technical jargon vs. accessible storytelling (Nisbet, 2009). Scholars analyze the discourse used by governments, corporations, and activists. Terms like "net zero," "sustainable development," and "resilience" are sometimes critiqued for being vague or co-opted by "green-washing" efforts (Bäckstrand & Lövbrand, 2006).

Sustainability language varies across cultures. For example, Indigenous perspectives often integrate sustainability with spiritual and relational language, emphasizing kinship with nature rather than resource management (Whyte, 2018). Storytelling is seen as a powerful tool for sustainability communication. Stories that highlight community success, local heroes, or future visions tend to drive deeper engagement than statistics alone (Moezzi, Janda, & Rotmann, 2017).

1. Focus and Purpose Statement: English for the Earth and Language Sustainability

Focus: This initiative explores the intersection of environmental advocacy and linguistic preservation through the use of the English language. It emphasizes how English can be a powerful tool for raising environmental awareness while also supporting the preservation of endangered languages and cultural identities in the context of globalization.

Purpose: The primary purpose is to empower learners to use English to engage in global conversations about environmental sustainability while promoting linguistic diversity and respect for local cultures. The program fosters ecological literacy, critical thinking, and

communication skills, encouraging participants to advocate for both environmental protection and the sustainability of indigenous and minority languages.

The focus of English of Sustainability is to explore how language—especially English—shapes, reflects, and communicates ideas related to sustainability by examining the discourse of sustainability, critically analyzing corporate, media and policy language about sustainability, teaching learners how to critically assess and use sustainability rhetoric effectively and supporting interdisciplinary education where sustainability is taught through and about English.

Table 1. Focus and Purpose of Language of Sustainability

	English for the Earth	Language of Sustainability
Focus	Using English to discuss and solve environmental issues	Specific words and styles used to promote sustainability
Purpose	Raise global environmental awareness through English	Inspire action toward sustainable living
Examples	Teaching kids about recycling in English, international climate talks	Words like "carbon footprint", phrases like "green economy"
Style	Educational, communicative	Hopeful, responsible, action-driven

2. Sustainability Terminology and Discourse

The "language of sustainability" refers to the vocabulary, phrases, and expressions commonly used when discussing environmental, social, and economic sustainability. Here are some examples, grouped by category:

3. Environmental Sustainability Language

There are some special terms used in language sustainability such as:

- a. Carbon footprint – the total greenhouse gases produced by a person, activity, or organization.

A carbon footprint is the total amount of greenhouse gases (mainly carbon dioxide, or CO₂) that are emitted directly or indirectly by an individual, organization, product, or activity. It's usually measured in tons of CO₂ equivalent (CO₂e), which includes not just carbon dioxide but other greenhouse gases like methane (CH₄) and nitro oxide (N₂O), adjusted for their global warming potential.

- b. Renewable energy – energy from natural sources that replenish (e.g., solar, wind, hydro).

Renewable energy is energy that comes from natural sources that are constantly replenished. Unlike fossil fuels (like coal, oil, and gas), which take millions of years to form and emit greenhouse gases when used, renewable energy sources are cleaner and more sustainable over the long term. Main Types of Renewable Energy is Solar Energy from the sun, Wind Energy from the movement of air (wind). Hydropower (Hydroelectric Energy) from flowing water. Biomass Energy from Organic materials like wood, agricultural waste, or animal manure, Geothermal Energy from Heat from beneath the Earth's surface. How it's used: Wells tap into hot water or steam reservoirs to generate power or provide direct heating. Common applications: Power plants, residential heating systems.

- c. Zero waste – designing and managing products/processes to avoid and eliminate waste.

Zero waste is a sustainability philosophy and lifestyle aimed at minimizing the amount of waste that ends up in landfills, incinerators, or the environment. The ultimate goal is to redesign systems and

habits so that all materials are reused, recycled, or composted, creating as little trash as possible.

Key Principles of Zero Waste: Refuse Say no to things you don't need (e.g., plastic straws, freebies), Reduce Cut back on what you use and buy only what's necessary, Reuse Choose reusable items over single-use products, Recycle Properly sort and recycle materials that can't be refused, reduced, or reused, Rot Compost organic waste like food scraps and yard trimmings.

d. Biodiversity – the variety of plant and animal life in an ecosystem.

Biodiversity, short for biological diversity, refers to the variety of life on Earth. This includes all living organisms plants, animals, fungi, and microorganisms as well as the ecosystems they form and the genetic differences within species. Biodiversity is commonly considered at three levels: Genetic diversity Variability in the DNA among individuals of the same species (e.g., dog breeds or different types of rice). Species diversity The variety of species within a habitat or region (e.g., the different birds in a rainforest). Ecosystem diversity. The variety of ecosystems in a region (e.g., forests, deserts, wetlands, coral reefs).

e. Climate resilience – the ability of systems to cope with climate-related stresses.

Climate resilience is the ability of a system such as a community, economy, or ecosystem to anticipate, prepare for, respond to, and recover from the impacts of climate change. This includes both sudden events like floods and wildfires, and long-term shifts such as rising sea levels or changing rainfall patterns.

Key Aspects of Climate Resilience: Preparedness Identifying potential climate risks (like extreme heat or drought) and taking proactive steps to reduce vulnerability. Adaptation Modifying infrastructure, policies, or behaviors to adjust to current and future climate conditions. For example: Building sea walls to protect against

rising tides. Designing buildings to stay cool during heatwaves. Shifting agricultural practices to suit new rainfall patterns. Response-Reacting effectively during climate-related events, such as having emergency services ready for hurricanes or wildfires. Recovery Rebuilding in ways that improve future resilience for example, reconstructing homes with fire-resistant materials after a wildfire. Equity-Ensuring that vulnerable and marginalized communities which often suffer the most from climate impacts are supported and included in resilience planning.

4. Social Sustainability Language

Social sustainability language refers to the vocabulary, expressions, and communication strategies used to promote and support social sustainability which is the aspect of sustainability focused on maintaining and improving the well-being, equity, and cohesion of communities and societies over the long term. It includes terms and themes like:

- a. Equity and inclusion – ensuring fair treatment, access, and opportunity for all.

Equity and inclusion in the language of sustainability refer to ensuring that the concepts, goals, and practices of sustainability are communicated and implemented in ways that are fair, accessible, and empowering to all people especially those who have been historically marginalized or underrepresented.

- b. Equity in Sustainability Language: Equity means recognizing that not everyone starts from the same place and that justice requires adjusting approaches to account for this.

In sustainability, equity involves: Addressing disparities: Acknowledging that environmental harm and climate change disproportionately affect low-income communities, Indigenous peoples, and communities of color. Tailoring solutions: Ensuring sustainability efforts do not just serve privileged groups but meet the

diverse needs of all populations. Distributive justice: Fair distribution of resources, risks, and benefits e.g., clean air, safe water, green spaces. In language, this means avoiding overly technical or academic jargon that excludes those without formal education or access to scientific discourse.

- c. Inclusion in Sustainability Language: Inclusion means actively ensuring that all voices are heard and valued in the conversation.

In sustainability, inclusion involves: Representation: Including diverse communities in decision-making processes related to climate and environmental policies. Cultural sensitivity: Recognizing and respecting traditional ecological knowledge, particularly from Indigenous and local communities. Linguistic accessibility: Communicating in multiple languages or using plain language so that more people can understand and engage.

- d. Why It Matters. Effective change: Sustainability efforts are more successful when they reflect the needs and knowledge of all affected communities. Ethical responsibility:

Environmental justice is a core pillar of sustainable development. Long-term resilience: Systems that center equity and inclusion are more adaptable and fair in the face of climate challenges.

- e. Fair trade – a movement to ensure ethical treatment of producers in developing countries.

Fair Trade, in the context of the language of sustainability, refers to a movement and system that promotes ethical standards in global trade especially with producers in developing countries by ensuring fair wages, safe working conditions, and environmentally responsible practices. Let's break this down through key sustainability-related language:

- f. Sustainability Principles in Fair Trade Language : Equity and Justice- Fair Trade emphasizes social equity, ensuring marginalized producers and workers are not exploited.

Language includes terms like “living wage,” “fair prices,” and “empowerment.” Environmental Stewardship- Fair Trade standards require environmentally sustainable farming and production methods. Common terms: “organic,” “pesticide-free,” “climate resilience,” “biodiversity protection.” Economic Viability- Sustainable development includes creating long-term economic opportunities. Language reflects this with phrases like “capacity building,” “market access,” and “sustainable livelihoods.” Transparency and Accountability- Fair Trade insists on traceability and ethical sourcing. Language here includes “supply chain transparency,” “certification,” and “ethical auditing.” Empowerment and Participation- Producers and communities are active decision-makers in Fair Trade. The sustainability narrative uses terms like “cooperatives,” “community development,” and “producer voice.” In Products and Marketing- When applied to products, Fair Trade often shows up in branding and messaging as: “Fairly traded cocoa/coffee/cotton”, “Supporting sustainable communities”, “Fair wages for farmers”, “Certified Fair Trade better for people and planet”

Summary, Fair Trade aligns closely with sustainability through its emphasis on ethical treatment of people, environmental care, and economic fairness. It uses a value-laden language that supports broader sustainable development goals (SDGs), especially Goal 8 (Decent Work and Economic Growth) and Goal 12 (Responsible Consumption and Production).

- g. Community engagement – involving local communities in decision-making processes.

Community engagement related to the language of sustainability refers to how communities are involved in sustainability efforts through communication, dialogue, and shared understanding using specific terms, narratives, and cultural expressions. It's about

how sustainability is talked about, understood, and acted upon collectively.

Here's a breakdown of the key ideas:

- 1) Language Shapes Understanding: The terms we use like “carbon footprint,” “green living,” “regenerative,” or “climate justice” influence how people perceive sustainability. For community engagement to be effective, the language must be clear, relatable, and culturally relevant.
- 2) Inclusive Communication: Using accessible language ensures that people from different educational, cultural, and linguistic backgrounds can participate. Technical jargon can alienate people; framing issues around shared values like health, fairness, or future generations tends to resonate more broadly.
- 3) Cultural Relevance: Different communities may have unique ways of talking about and practicing sustainability (e.g., Indigenous stewardship, traditional ecological knowledge). Community engagement works best when the language of sustainability respects and incorporates local identities and knowledge systems.
- 4) Dialogue Process: Engagement isn't one-way. It's about creating dialogue where communities can question, reinterpret, and reshape sustainability in their own terms. This empowers communities and builds ownership over sustainability initiatives.
- 5) Narratives and Storytelling: Stories are powerful tools for engagement. They translate abstract sustainability goals into personal and community-level impacts. For example, talking about how climate change affects local farming, health, or children's futures can motivate action more than abstract statistics.

- 6) Bridging the Gap Between Policy and People: Often, sustainability policies are written in formal or institutional language. Community engagement helps bridge this gap, translating top-down policies into local action through meaningful communication.
- h. Labor rights – protections and standards for workers' well-being and fair treatment.

Labor rights and sustainability are deeply interconnected, particularly when we discuss the language of sustainability in relation to the workplace. Labor rights refer to the basic rights and protections afforded to workers in the workplace, ensuring fair treatment, safety, and dignity. Sustainability, on the other hand, involves meeting present needs without compromising the ability of future generations to meet their own needs, balancing social, environmental, and economic concerns.

- 1) How Labor Rights Relate to Sustainability. When we talk about sustainability in the context of labor rights, we often refer to the idea of social sustainability the aspect that focuses on the well-being, fairness, and rights of workers within the broader framework of environmental and economic sustainability. This relationship has grown in importance as industries, governments, and organizations begin to understand that long-term sustainability can't be achieved without respecting labor rights.
- 2) Key Aspects of Labor Rights in the Language of Sustainability:
- 3) Fair Wages and Economic Security: Sustainable development emphasizes decent work, which includes fair wages that allow workers to live above the poverty line. In the language of sustainability, fair wages are not just a moral issue, but also contribute to social stability and economic growth, reducing inequalities within societies. The pursuit of fair wages helps to

- ensure that the economic benefits of growth are equitably distributed, which is a core tenet of social sustainability.
- 4) **Safe and Healthy Working Conditions:** A key element of labor rights is the right to safe and healthy working conditions, and this is also crucial for sustainability. Sustainable practices in the workplace involve providing workers with proper safety standards, access to health care, and preventing harmful environmental impacts (such as exposure to toxic substances). This relates directly to environmental sustainability, as industries should ensure that their operations do not harm workers' health, whether from pollution, dangerous machinery, or unsafe buildings.
 - 5) **Freedom of Association and Collective Bargaining:** The right to organize and engage in collective bargaining is another cornerstone of labor rights that ties into sustainability. In a sustainable society, workers must have the right to unionize and negotiate for better wages, benefits, and working conditions. Collective bargaining enables workers to advocate for their rights and ensure that companies are held accountable for the treatment of their labor force, promoting more responsible and transparent business practices.
 - 6) **Non-Discrimination and Equal Opportunities:** Sustainability calls for inclusive societies, and labor rights are crucial in ensuring equal treatment and non-discrimination in the workplace. In the context of sustainability, this means ensuring gender equality, providing equal opportunities for marginalized groups, and addressing pay gaps. Social sustainability hinges on building equitable workplaces where everyone has access to the same opportunities, regardless of race, gender, disability, or any other characteristic.

- 7) **No Child or Forced Labor:** A sustainable workforce is free from child labor and forced labor. In the language of sustainability, this is a non-negotiable standard, as these practices exploit vulnerable populations and create long-term harm to individuals and society. Labor rights related to preventing child labor and forced labor are essential to a socially responsible, ethical approach to business.
- 8) **Sustainable Supply Chains:** As companies focus on sustainable supply chains, labor rights become critical. The sustainability of a business is often evaluated not only by its environmental footprint but also by how it manages its workforce. Companies must ensure that their suppliers uphold labor rights standards, guaranteeing that workers throughout the supply chain receive fair treatment and their rights are respected.
- 9) **Work-Life Balance and Well-being:** Sustainable work environments prioritize mental health and work-life balance. This means respecting workers' rights to reasonable working hours, adequate vacation time, and support for their personal well-being. Social sustainability involves creating a culture that promotes worker satisfaction, which ultimately supports long-term productivity and economic viability.
- 10) **Global Frameworks and Agreements:** International frameworks like the United Nations Sustainable Development Goals (SDGs) and the International Labour Organization (ILO) conventions emphasize the relationship between labor rights and sustainability. The SDGs, particularly Goal 8 (Decent Work and Economic Growth), stress the need for labor rights, equitable economic growth, and sustainable livelihoods. The ILO sets international labor standards to safeguard workers' rights, and it aligns with the broader sustainable development agenda by advocating for fair labor practices.

11) In short, Labor rights are essential to the social dimension of sustainability. Achieving a sustainable future means addressing the needs and rights of workers, ensuring fair wages, safe working conditions, and equal opportunities for all. Without respecting labor rights, any efforts toward environmental or economic sustainability will likely fail, as a healthy, equitable society is fundamental for long-term success. The language of sustainability, in this context, always includes the principle that human dignity and well-being are central to the health of the planet and the economy.

- i. Cultural preservation – sustaining cultural heritage and practices over time.

Cultural preservation and language are central to the concept of sustainability, particularly when it comes to sustainable development that values not just environmental and economic factors but also cultural and social dimensions. The language of sustainability often refers to the way we communicate and frame sustainability issues—using language to emphasize respect for cultural diversity, local traditions, and indigenous knowledge. Here’s how cultural preservation and language play a role in sustainability:

- 1) Cultural Identity and Heritage: Cultural preservation is closely tied to protecting and promoting cultural identity. Language is a key part of cultural identity—it’s the vessel for sharing knowledge, traditions, values, and ways of life that have been passed down through generations. When a language is lost, there is a loss of cultural heritage as well, which can make communities less resilient in the face of environmental or social challenges. In the context of sustainability, the preservation of indigenous languages is essential because these languages often carry unique knowledge about sustainable practices. For example, many indigenous languages contain terms for local

ecosystems, medicinal plants, and agricultural techniques that have been used sustainably for centuries. When these languages are preserved and revitalized, it helps keep the sustainable practices embedded in the culture alive.

- 2) **Indigenous Knowledge Systems:** Many indigenous communities around the world have deep ecological knowledge that has been developed over centuries. This knowledge is often embedded in their languages, and without preserving these languages, we risk losing valuable insights into how to live in harmony with nature. Traditional ecological knowledge (TEK), which is passed down through language, encompasses sustainable farming, fishing, and land management practices that have been adapted to local environments. When the language is lost, we also lose the contextual understanding of how to manage resources sustainably. For instance, in some indigenous cultures, the language includes detailed ways of discussing the seasons, local wildlife, and how to approach the natural world with respect and balance.
- 3) **Language and Environmental Advocacy:** The language of sustainability isn't just about talking about the environment—it's about ensuring that the language we use acknowledges the disconnectedness of culture, society, and nature. Cultural preservation and language revitalization are part of environmental justice because marginalized and indigenous communities often face the brunt of environmental degradation and climate change. Language allows them to advocate for their rights, raise awareness of environmental threats, and assert control over their land and resources. Moreover, creating spaces for these languages to be heard in global sustainability conversations ensures that diverse perspectives and solutions are included. It challenges the dominance of western models of

development, highlighting the value of alternative knowledge systems that emphasize long-term sustainability, biodiversity conservation, and social equity.

- 4) Sustainability through Cultural Practices: Many traditional practices related to farming, water management, and forest conservation are designed with sustainability in mind. These practices are communicated and enforced through language, making cultural preservation integral to ensuring that future generations can continue to benefit from these eco-friendly methods. For example: Aggro-ecology practiced by indigenous communities often incorporates sustainable farming methods like crop rotation and agroforestry. Water management techniques that use local knowledge to preserve water resources for the long term are often expressed in community-based languages. Cultural festivals may have ecological messages or involve seasonal rituals that maintain a balance with nature.
- 5) Revitalization and Education: The revitalization of endangered languages is an important form of cultural sustainability. By promoting and teaching these languages, we create opportunities for younger generations to engage with their cultural roots and sustainable practices. This educational process doesn't just help preserve language—it also reinforces the principles of sustainable development, such as equity, inclusion, and respect for cultural diversity. In practice, efforts to revitalize indigenous languages often focus on integrating them into schools, media, and community programs. This helps ensure that language continues to be used in daily life, enabling new generations to inherit the sustainable knowledge embedded within their cultural traditions.

6) Conclusion: In the language of sustainability, cultural preservation is not just about maintaining old ways but ensuring that diverse ways of knowing, being, and interacting with the environment are valued and passed on. By prioritizing the preservation of languages and cultural practices, we can foster sustainable systems that respect both the natural world and the communities that live within it. It's about honoring inter-generational knowledge and promoting a vision of sustainability that is rooted in both social and environmental harmony.

3.2. Economic Sustainability Language

There are some terms used in economic sustainability language such as:

1. Circular Economy – an Economic Model That Focuses on Reuse, Repair, and Recycling.

A circular economy is an alternative to the traditional linear economic model, which typically follows a "take, make, dispose" pattern. In a circular economy, the goal is to maximize the value of products and materials by keeping them in use for as long as possible. This is achieved through strategies like reuse, repair, re-manufacturing, and recycling. Here are some key elements of a circular economy: Design for Longevity: Products are designed with a longer lifespan, making them more durable and easier to repair. Reuse and Repair: Instead of discarding used goods, they are repaired or refurbished to extend their life. Recycling: Materials from products that can no longer be repaired are recycled and used to make new products, thus reducing the need for raw materials. Resource Efficiency: The circular economy encourages the efficient use of resources, minimizing waste and environmental impact. Business Models: New business models, such as product-as-a-service or sharing platforms, are used to reduce

consumption and improve access to goods without ownership, like leasing instead of buying.

By closing the loop in production and consumption, the circular economy aims to reduce waste, conserve resources, and lower environmental impacts, contributing to sustainability.

2. Green Economy – an Economy Aimed at Reducing Environmental Risks and Ecological Scarcities.

The concept of a green economy refers to an economic system that seeks to reduce environmental risks and ecological scarcities while promoting sustainable development. It aims to improve human well-being and social equity while significantly reducing environmental harm, particularly the depletion of natural resources and biodiversity loss. Key characteristics of a green economy include: Sustainable Resource Use: A green economy prioritizes the efficient use of renewable resources and ensures that natural resources are conserved and managed in a way that supports long-term ecological balance. Reduction of Carbon Emissions: It emphasizes the importance of reducing greenhouse gas emissions to combat climate change. This includes shifting to renewable energy sources like solar, wind, and hydro power.

3. Waste Minimization: a Green Economy Promotes a Circular Economy Model, Where Products are Reused, Recycled, or Refurbished to Reduce Waste, Rather Than Relying on A Linear "Take-Make-Dispose" Model.

Green Technologies and Innovation: Investment in technologies that reduce environmental impact, such as electric vehicles, energy-efficient buildings, and sustainable agriculture, is a key part of a green economy. Social Inclusion and Equity: A green economy supports social justice by ensuring that the benefits of environmental sustainability are shared broadly, including job creation in sustainable industries and providing access to clean energy and other essential services to all

communities. Integration of Natural Capital into Economic Systems: It recognizes the value of nature and ecosystem services (e.g., clean water, air, and biodiversity) in economic planning and decision-making.

In summary, a green economy seeks to balance economic growth with the health of the planet, aiming for a society that thrives within environmental limits and operates on sustainable practices.

4. Sustainable Development - Development that Meets Current Needs Without Compromising Future Generations.

Sustainable development is indeed a concept that emphasizes the importance of balancing the needs of the present with the ability of future generations to meet their own needs. It involves the careful management of resources in a way that does not deplete them, while promoting economic growth, social inclusion, and environmental protection. Key aspects of sustainable development include: Economic Sustainability: Ensuring that economic growth occurs in a way that does not harm the environment or society, and that it provides long-term benefits to all people. Social Sustainability: Promoting fairness, equity, and social inclusion, ensuring that everyone has access to basic needs such as healthcare, education, and a decent standard of living. Environmental Sustainability: Protecting natural ecosystems and resources, minimizing pollution, and conserving biodiversity, all while maintaining the ability of the Earth's systems to support life.

The goal of sustainable development is to create a future where people and the planet thrive together, with the well-being of all generations in mind

Triple bottom line – evaluating performance based on social, environmental, and financial factors. The Triple Bottom Line (TBL) is a framework that evaluates a company's performance based on three key pillars: social, environmental, and financial factors. It is a concept introduced by John Elkington in 1994, advocating for businesses to go

beyond profit-making and consider the broader impact of their activities.

3.3. Pillars of Sustainable Development

There are three pillars of sustainability Development in language of earth, they are economic, social and environmental. The 3 Pillars of Sustainable Development. We may consider and think of sustainable development like a strong building resting on three pillars.

Table 2. The Three Pillars of Sustainable Development

Pillar	Goal	Example
Economic	Build stable, growing economies that offer jobs and opportunities without depleting resources.	Promoting renewable energy industries, not just fossil fuels.
Social	Create fair and inclusive societies where people's rights are respected.	Providing education and healthcare for all.
Environmental	Protect the Earth's ecosystems, biodiversity, and climate.	Conserving forests, reducing carbon emissions.

3.4. Common Challenges in Environmental Communication

In the process of equipping people with the language and skills needed to effectively communicate about environmental issues, often face some common challenges, such as:

1. Complexity of Scientific Concepts: Environmental topics often involve technical terms (e.g., "carbon sequestration," "biodiversity loss") that are hard to explain to a non-expert

audience. Simplifying without losing accuracy is a major challenge.

2. Cultural and Linguistic Barriers: Environmental messaging may not resonate equally across cultures or regions. English terms may not have direct equivalents in other languages, leading to confusion or misinterpretation.
3. Jargon and Overuse of Buzzwords: Terms like “sustainable,” “green,” or “eco-friendly” are often overused or misused, reducing their impact. Communicators risk alienating audiences by sounding too technical or insincere.
4. Cognitive Overload and Fatigue: People may feel overwhelmed by doom-laden messages (e.g., climate crisis, extinction), leading to apathy or disengagement (“eco-anxiety” or “climate fatigue”).
5. Lack of Practical Application: Abstract or broad messages (e.g., “Save the planet!”) may not provide clear, actionable steps. Listeners may feel powerless if they don’t know how to contribute meaningfully.
6. Persuasion vs. Polarization: Environmental topics can be politically or ideologically charged. Poorly framed communication can lead to resistance or polarization, especially in debates over climate policy or renewable energy.
7. Measuring Impact: It’s often difficult to evaluate whether communication efforts have actually changed behavior, policy, or perception.

The language of sustainability and the language of Earth are deeply intertwined, both rooted in the understanding, respect, and preservation of natural systems. To speak the language of sustainability

is to listen to the rhythms of the planet, honor ecological balance, and communicate in ways that promote harmony between humans and nature. By aligning our words, actions, and values with the needs of the Earth, we foster a future where cultural, environmental, and linguistic diversity can thrive together. Sustainability, therefore, is not only a practice but a shared dialogue — one that transcends borders and generations to protect the voice of the Earth itself.

REFERENCES

- Bäckstrand, K., & Lövbrand, E. (2006). Planting trees to mitigate climate change: Contested discourses of ecological modernization, green governmentality and civic environmentalism. *Global environmental politics*, 6 (1), 50-75.
- BEARTH, T. (2008). Language as a key to understanding development from a local perspective. *Henry Tourneux (dir.)*, 35.
- Dryzek, J. S. (2022). *The politics of the earth: Environmental discourses*. Oxford university press.
- Jickling, B. (2001). Environmental thought, the language of sustainability, and digital watches. *Environmental Education Research*, 7 (2), 167-180.
- Lakoff, G. (2010). Why it matters how we frame the environment. *Environmental communication*, 4 (1), 70-81.
- McHugh, L. H., Lemos, M. C., & Morrison, T. H. (2021). Risk? Crisis? Emergency? Implications of the new climate emergency framing for governance and policy. *Wiley Interdisciplinary Reviews: Climate Change*, 12 (6), e736.
- Moezzi, M., Janda, K. B., & Rotmann, S. (2017). Using stories, narratives, and storytelling in energy and climate change research. *Energy Research & Social Science*, 31, 1-10.
- Moser, S. C. (2016). Reflections on climate change communication research and practice in the second decade of the 21st century: what more is there to say?. *Wiley Interdisciplinary Reviews: Climate Change*, 7 (3), 345-369.
- Tepora, T. (2014). The Mystified War: Regeneration and Sacrifice. *The Finnish Civil War 1918: History, Memory, Legacy*, 159-200.
- Whyte, K. P. (2018). Indigenous science (fiction) for the Anthropocene: Ancestral dystopias and fantasies of climate change

crises. *Environment and Planning E: Nature and Space*, 1(1-2), 224-242.





THE ROLE OF ENGLISH IN ENVIRONMENTAL ADVOCACY

By: Dr. Dias Andris Susanto, M.Pd.

4.1. Introduction

1. The urgency of environmental communication

In the twenty-first century, environmental degradation has accelerated to unprecedented levels, posing critical threats not only to ecosystems but also to human societies worldwide (IPCC, 2021). Issues such as global warming, biodiversity loss, ocean acidification, and the depletion of natural resources have generated what many scholars call a planetary emergency (Ripple et al., 2020). In response, effective environmental communication has emerged as a key instrument to bridge scientific knowledge, public awareness, and policy action (Cox & Pezzullo, 2016).

Environmental communication is not merely about disseminating information; it is about fostering a collective understanding and motivating behavioral change (Moser, 2016). Without strategic communication, scientific facts often fail to translate into public engagement or political will. Research shows that storytelling, framing, and linguistic accessibility significantly shape how environmental messages are perceived and acted upon (Nisbet,

2014; Swim & Bloodhart, 2020). In this sense, communication is no longer a supplementary tool in environmental movements; it is a central force driving social transformation towards sustainability.

Moreover, the urgency of environmental communication has intensified with the rise of global crises such as the COVID-19 pandemic, which exposed the interconnectedness between human health, ecological integrity, and societal resilience (United Nations Environment Programme, 2021). Communicating these links effectively is critical for building a more sustainable post-pandemic future.

2. Why English matters in global advocacy

In this context of urgent environmental action, English holds a strategic position as a global communication tool. As the most widely spoken second language and the dominant language in science, politics, business, and digital media, English plays an outsized role in shaping global environmental discourse (Crystal, 2012; Seidlhofer, 2018).

English is the primary working language of major international environmental organizations such as the United Nations Environment Programme (UNEP), the Intergovernmental Panel on Climate Change (IPCC), Greenpeace International, and the World Wildlife Fund (WWF). Reports, policy briefs, and scientific assessments that inform international agreements from the Paris Agreement to the Kunming-Montreal Global Biodiversity Framework are predominantly drafted and disseminated in English (IPCC, 2021; UNEP, 2022).

Furthermore, the rise of digital activism has further entrenched English's role. Movements like Fridays for Future, initiated by Greta Thunberg, and campaigns like Earth Hour leverage English to achieve global reach through social media, allowing messages to resonate across diverse cultures and national boundaries (de Moor et al., 2020).

However, while English serves as a powerful connector, scholars also caution against an uncritical celebration of its dominance. Linguistic hegemony can marginalize non-English-speaking communities, excluding vital local knowledge and perspectives essential for holistic environmental solutions (Pennycook & Otsuji, 2015; Hornberger, 2022). Therefore, while English enables broader advocacy, responsible communicators must strive for inclusivity, acknowledging the importance of multilingualism in environmental justice efforts.

In sum, mastering English equips environmental advocates with critical tools to amplify their voice on the global stage. Yet, it must be wielded ethically, recognizing that environmental challenges and their solutions are inherently multilingual and multicultural.

4.2. English as a Global Bridge

1. English as a lingua franca

In the realm of environmental communication, English functions predominantly as a lingua franca a common language used among speakers of different native languages to facilitate communication and collaboration (Seidlhofer, 2018). This role has grown increasingly significant with the intensification of global environmental challenges that require transnational dialogue and coordinated action. English enables individuals, organizations, and governments from diverse linguistic backgrounds to share research findings, exchange best practices, and build collective strategies for environmental protection.

The use of English as a lingua franca (ELF) particularly shines in transdisciplinary environmental projects, where scientists, activists, policymakers, and community leaders must work together despite vast cultural and linguistic differences. Jenkins et al. (2011) note that English used in these settings often departs from native-speaker norms, emphasizing intelligibility, negotiation of meaning, and

cooperation over grammatical perfection. This adaptability allows English to serve not merely as a tool for communication but as a flexible medium for building shared environmental understanding.

Moreover, English's role as a lingua franca empowers grassroots movements. Community activists, indigenous leaders, and youth climate advocates utilize English to forge international alliances and amplify local environmental struggles on the global stage (Kirkpatrick, 2020). For instance, indigenous groups fighting deforestation in the Amazon increasingly issue press releases and engage in advocacy campaigns in English to gain international solidarity and media attention.

However, the dominance of English as a lingua franca is not without complications. Scholars warn of the potential "language injustice," where non-native speakers must invest additional cognitive and emotional resources to participate, sometimes leading to the underrepresentation of critical local knowledge (Hornberger, 2022; Pennycook & Otsuji, 2015). Thus, while English facilitates global environmental advocacy, care must be taken to ensure equitable participation across linguistic communities.

2. International conferences and environmental agreements

International conferences and environmental agreements are among the clearest examples of English's centrality to global environmental governance. English serves as the primary or co-official language at major forums such as:

- a. The United Nations Framework Convention on Climate Change (UNFCCC) and its annual Conference of the Parties (COP) meetings.
- b. The Convention on Biological Diversity (CBD) negotiations.
- c. The Stockholm+50 Conference on sustainability and environmental policy.
- d. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) plenaries.

At these events, English is the language in which draft resolutions, negotiation texts, scientific assessments, and press releases are first composed and often negotiated (UNFCCC, 2022). For instance, the landmark *Paris Agreement* (2015) although legally translated into several UN official languages was primarily drafted, negotiated, and discussed in English during its formulation phase (Rajamani, 2016).

This dominance affects not only the content but also the structure of environmental diplomacy. Proficiency in English has become a de facto requirement for full participation in negotiations, influencing whose voices are heard and whose interests are prioritized (Gaventa, 2020). As a result, environmental professionals from non-Anglophone countries often face the dual burden of mastering technical content and operating effectively in a second or third language.

Nonetheless, English's role as the bridge language at these conferences has significant positive outcomes. It allows for broader participation, quicker dissemination of key environmental decisions, and stronger transnational networks for implementation and monitoring (Stevenson, 2021). Activists, NGOs, and media organizations also use English-based materials produced during these conferences to raise global awareness and pressure policymakers for action back home.

Overall, the role of English in international environmental governance is both a powerful enabler of global collaboration and a challenge that requires sensitivity to linguistic diversity and inclusivity.

4.3. Amplifying Environmental Movements through English

1. Social media and activism

The advent of social media has radically transformed the landscape of environmental advocacy. Platforms like Twitter,

Instagram, TikTok, and Facebook have become powerful arenas where environmental messages can reach millions within hours. In this digital activism ecosystem, English serves as a primary language, not only because of its global reach but also because it connects diverse activists, organizations, and audiences across continents (Castells, 2015).

Movements such as Fridays for Future, initiated by Greta Thunberg, demonstrate how English slogans (“School Strike for Climate”) and hashtags (#ClimateStrike, #FridaysForFuture) catalyze international solidarity (de Moor et al., 2020). Likewise, campaigns like #SaveTheArctic and #PlasticFreeJuly have successfully mobilized global citizen action, largely through English-language posts and materials. By framing environmental issues in English, activists ensure that their causes are not confined by national borders but become part of a global conversation.

Moreover, English facilitates transmedia storytelling, where a cause is told across multiple platforms and media formats (Jenkins, 2016). A single environmental protest, recorded in real time and narrated in English, can travel through news articles, podcasts, short films, and viral memes reaching audiences who might not otherwise engage with environmental issues. Importantly, research by Leong (2022) highlights that English-language environmental activism on social media has a multiplier effect, inspiring new local movements in non-English-speaking countries, who then adapt the messages into their native languages while maintaining the original English campaign threads for global solidarity.

However, this dominance also raises concerns: campaigns heavily relying on English may inadvertently exclude local communities, creating a disconnect between global narratives and local realities (Tufte, 2017). Thus, while English amplifies reach,

effective activism often involves blending global English messaging with localized, culturally sensitive communication strategies.

2. Global campaigns and English slogans

Environmental campaigns depend heavily on concise, emotionally powerful messaging and English has proven to be an efficient language for producing globally resonant slogans. Short, memorable phrases like:

- a. "There is No Planet B"
- b. "Act Now for Tomorrow"
- c. "Climate Justice Now"
- d. "Protect Our Future"

Have become rallying cries in climate marches, petitions, and online advocacy (Nisbet, 2014; Moser, 2016).

The effectiveness of these English slogans lies in their simplicity, rhythm, and universality. Environmental communication studies show that short English phrases often evoke moral urgency, collective identity, and action-oriented frames all critical elements for mobilizing supporters (Cox & Pezzullo, 2016; Swim & Bloodhart, 2020). For instance, Greenpeace International's campaigns - from opposing oil drilling to promoting renewable energy - consistently use sharp, action-driven English slogans that are instantly translatable across different media platforms. Similarly, World Environment Day, celebrated by the United Nations each year, uses English themes such as "Only One Earth" (2022) to unite governments, schools, and civil society under a common environmental cause.

Furthermore, English slogans serve as entry points for media coverage. International news outlets often favor English-language messages when reporting on environmental protests and conferences, giving campaigns broader visibility (Boykoff, 2019).

Nevertheless, reliance on English slogans must be accompanied by cultural adaptation when engaging local populations. Scholars

advocate for a "glocal" approach—combining global English messaging with locally relevant translations and interpretations—to maximize both reach and resonance (Appadurai, 2013).

4.4. English in Scientific and Policy Communication

1. English in Scientific Publications

English has become the dominant language for publishing scientific research across disciplines, and environmental science is no exception. Prestigious journals such as *Nature Climate Change*, *Global Environmental Change*, and *Environmental Research Letters* almost exclusively publish in English, establishing it as the global norm for scholarly communication (Montgomery, 2017; Ammon, 2012).

The prevalence of English in environmental scientific publications offers several key advantages:

- a. **Wider Audience Reach:** Publishing in English ensures that research findings can be disseminated globally, crossing linguistic and national boundaries (Flowerdew, 2015).
- b. **Academic Collaboration:** English enables scientists from diverse backgrounds to collaborate on international research projects addressing complex, global environmental issues (Ferguson, 2018).
- c. **Increased Impact and Citation Rates:** Studies show that articles written in English are more likely to be cited, increasing the visibility and influence of research outcomes (Hanauer & Englander, 2011).

However, this dominance also introduces challenges for non-native English-speaking researchers, who may experience disadvantages in terms of writing proficiency, editorial acceptance, and additional publication costs (Salager-Meyer, 2014). This phenomenon, often termed linguistic injustice, risks silencing valuable contributions, particularly from researchers in the Global South where much of the world's biodiversity and environmental issues are located (Canagarajah, 2020).

Moreover, the overemphasis on English can lead to the undervaluation of local knowledge systems, many of which are embedded in indigenous languages and offer crucial insights for environmental conservation and adaptation strategies (Tulloch et al., 2018).

Thus, while English enables scientific dissemination, there is an urgent need to create more equitable spaces for multilingual knowledge-sharing alongside English-dominant platforms.

2. Policy Influence through English Documentation

In the realm of environmental policy, English plays a pivotal role in the drafting, negotiation, and dissemination of key international agreements and guidelines. Foundational documents such as:

- a. The Paris Agreement (2015)
- b. The Kyoto Protocol (1997)
- c. UNEP's Global Environment Outlook Reports

were all initially framed and negotiated in English before translations into other UN languages were prepared (Rajamani, 2016; UNEP, 2022).

3. English Serves Several Critical Functions in Policy Communication:

Conceptual Consistency: Technical terms related to climate change, biodiversity, and sustainable development are often first coined and standardized in English, ensuring global coherence in legal interpretation and application (Fidler, 2014).

Efficiency in Diplomacy: Multilateral environmental negotiations typically occur in English, allowing delegates from different linguistic backgrounds to debate and reach consensus more rapidly (Chasek et al., 2020).

Global Advocacy and Mobilization: International NGOs, civil society groups, and advocacy campaigns frequently produce policy briefs, reports, and position papers in English to influence both international and domestic policy agendas (Boykoff, 2019).

However, the heavy reliance on English raises equity concerns:

Participation Barriers: Representatives from less English-proficient backgrounds may find it harder to fully engage in negotiations or influence outcomes (Morales & Harris, 2021).

Misinterpretation Risks: Important nuances in national positions or indigenous perspectives might be lost in translation or oversimplified when communicated in English (Tufte, 2017).

In response, some international organizations are now promoting inclusive translation practices and encouraging the use of multilingual policy dialogues to ensure broader participation and richer deliberation.

Thus, while English undoubtedly facilitates the efficiency and spread of environmental policies, ensuring fairness and inclusivity in communication remains a critical ethical imperative.

4.5. The Role of English in Environmental Education

1. Global Awareness Programs

English plays a central role in the design and delivery of global environmental awareness programs, reaching diverse audiences across continents. Organizations such as UNESCO, UNEP, WWF, and Greenpeace heavily rely on English to promote environmental literacy, sustainability education, and citizen engagement worldwide (UNESCO, 2020).

Key aspects where English proves critical:

- a. **Curriculum Development:** Global environmental education frameworks, such as UNESCO's *Education for Sustainable Development (ESD)* initiative, are primarily drafted and promoted in English, influencing national curricula across many countries (UNESCO, 2020).
- b. **International Campaigns:** Movements like *Earth Hour*, *Fridays for Future*, and *The Climate Reality Project* utilize English slogans,

hashtags, and materials to create unified global messages that transcend national boundaries (Fisher, 2020).

- c. Online Learning Platforms: Massive Open Online Courses (MOOCs) on environmental topics—such as those offered by Coursera, edX, and FutureLearn—predominantly deliver content in English, making knowledge on climate science, conservation, and sustainable development accessible to millions (Dearden, 2014; Joksimović et al., 2018).

Through English, environmental education programs achieve:

- a. Wider Participation: Students, teachers, and activists from non-English-speaking countries often engage first with English materials, then adapt or translate them locally.
- b. Knowledge Standardization: English-based materials help standardize core environmental concepts globally, such as "carbon footprint," "biodiversity loss," or "climate justice" (Sterling, 2014).
- c. Resource Sharing: Educational resources, such as toolkits, handbooks, and training videos, can be rapidly shared across regions without the delays of multi-language production.

Nevertheless, critics argue that relying predominantly on English risks creating a linguistic hierarchy in environmental education, where non-English-speaking communities must constantly adapt external narratives rather than developing and expressing their own (Pennycook, 2021). To address this, some programs increasingly encourage localized adaptations and multilingual approaches that respect cultural diversity while leveraging English for global reach.

4.6. Environmental Documentaries and Media in English

English-language environmental documentaries and media productions have significantly shaped public understanding, activism, and policy debates on ecological issues over the past two decades.

Seminal works include:

- a. *An Inconvenient Truth* (2006) and *An Inconvenient Sequel: Truth to Power* (2017) by Al Gore
- b. *Our Planet* (2019) narrated by Sir David Attenborough
- c. *Seaspiracy* (2021) and *Cowspiracy* (2014)
- d. *Breaking Boundaries: The Science of Our Planet* (2021)

These productions, broadcast primarily in English and distributed globally through platforms like Netflix, BBC Earth, and National Geographic, serve several crucial functions:

- a. **Raising Environmental Consciousness:** Visual storytelling, combined with accessible English narration, brings urgent issues—such as climate change, deforestation, and ocean pollution—into public discourse (Nisbet & Scheufele, 2019).
- b. **Mobilizing Global Action:** Documentaries often end with calls to action, inspiring international petitions, protests, and consumer behavior shifts, particularly among English-literate audiences (Howe, 2020).
- c. **Shaping Policy Agendas:** High-profile films like *An Inconvenient Truth* have demonstrably influenced public opinion and political platforms, with ripple effects in international policy discussions (Nisbet, 2014).

Additionally, English-dominated social media campaigns, podcasts (e.g., *Outrage and Optimism*), and YouTube channels (e.g., *Our Changing Climate*) have emerged as critical spaces for environmental storytelling, reaching especially younger, digitally connected audiences (León & Bourk, 2018).

However, linguistic accessibility remains a challenge:

- a. **Limited Reach to Non-English Speakers:** Although many documentaries are subtitled or dubbed, the original English scripts often carry cultural references or rhetorical nuances that are difficult to fully translate (O'Brien & Szarkowska, 2017).
- b. **Representation Biases:** English-language productions often

prioritize Western narratives, which may marginalize indigenous and Global South perspectives crucial to holistic environmental understanding (Cronin, 2017).

To build truly inclusive environmental media, producers are increasingly exploring multilingual content strategies, local-language versions, and partnerships with non-English-speaking filmmakers.

4.7. Challenges and Ethical Considerations

1. Risks of Linguistic Imperialism

While English is indispensable in global environmental communication, its dominant role raises important ethical concerns, particularly regarding linguistic imperialism. Linguistic imperialism refers to the global dominance of English at the expense of other languages, leading to power imbalances in communication and knowledge production (Phillipson, 2012). In the context of environmental advocacy, the risks are multifaceted:

- a. **Exclusion of Non-English Speakers:** Non-native English speakers often find themselves in a subordinate position, needing to learn English in order to participate in global environmental discourse, scientific publishing, and policymaking. This creates a barrier to full participation in discussions on critical issues such as climate change, biodiversity conservation, and environmental justice (Canagarajah, 2020).
- b. **Cultural and Ecological Marginalization:** Many environmental issues, particularly in the Global South, are rooted in local contexts and indigenous knowledge. When the dominant language is English, the local voices and traditional ecological wisdom from these communities may be sidelined or misrepresented (Tulloch et al., 2018). As such, the language of power can inadvertently diminish the representation and significance of non-Western knowledge systems that are critical to addressing local

environmental challenges.

- c. **Monocultural Narratives:** Environmental policies and advocacy campaigns often framed in English tend to reflect Western values and scientific paradigms, overlooking indigenous perspectives on sustainability, land stewardship, and biodiversity (Garrard et al., 2018). This creates a monocultural bias in global environmental discourses, further entrenched by the global reach of English-language media and educational programs.

These imbalances contribute to the perpetuation of linguistic and cultural hierarchies where English becomes the gatekeeper for accessing resources, knowledge, and global decision-making forums. Consequently, there is an ongoing debate about how to mitigate these risks without undermining the efficacy of English as a global communication tool in environmental advocacy.

2. Promoting Inclusivity and Multilingualism in Advocacy

To counteract the negative impacts of linguistic imperialism and foster a more inclusive global environmental dialogue, there is a growing push to promote multilingualism in environmental advocacy. This involves not only the inclusion of English but also the recognition of other languages as valuable and necessary for a balanced, equitable approach to environmental communication.

Key strategies to promote inclusivity and multilingualism include:

- a. **Multilingual Policy Documents:** International agreements and environmental policies can be produced in multiple languages to ensure that non-English-speaking nations can fully engage in the policy process. For example, major UN environmental treaties, such as the Paris Agreement, now include multilingual texts to ensure wider participation and understanding (Rajamani, 2016). Such efforts promote equal footing for all stakeholders and encourage broader global buy-in.

- b. Inclusive Education Models: Environmental education programs can be adapted to incorporate multiple languages, ensuring that students, particularly in developing countries, can learn about climate science, sustainability, and conservation in their native languages. This not only improves the quality of education but also strengthens local engagement in environmental initiatives (Pennycook, 2021).
- c. Collaborative Localized Advocacy: NGOs and environmental organizations can work alongside local communities to translate advocacy materials, media campaigns, and reports into regional languages. This enables grassroots organizations to amplify local perspectives and solutions that are crucial for sustainable development (Wang, 2019).
- d. Training Multilingual Environmental Leaders: Initiatives that provide language and communication training for environmental leaders from diverse linguistic backgrounds are crucial. By empowering these leaders with the necessary skills in both local languages and English, it is possible to create a more inclusive leadership structure that represents the interests of various linguistic communities (Tuftte, 2017).

Additionally, the rise of digital technologies and social media has made it easier for advocates to engage audiences in multiple languages. Platforms such as Twitter, YouTube, and Facebook have been leveraged to share multilingual content about environmental justice, climate change, and sustainability (León & Bourk, 2018). These platforms allow for the creation of hybrid linguistic forms, where English coexists with regional languages to convey messages in diverse and accessible ways.

In conclusion, a multilingual approach can enhance the richness and inclusivity of global environmental advocacy, ensuring that all

voices are heard and that the shared goal of a sustainable future can be achieved by diverse, collaborative means.

Conclusion

1. Summary of Key Points

This chapter has explored the multifaceted role of English in environmental advocacy, highlighting its significance, challenges, and ethical considerations. English has undeniably become the global lingua franca for environmental communication, functioning as the main medium through which scientific knowledge, policy agreements, and public awareness campaigns are disseminated. Its role as a tool for global outreach has facilitated cross-border environmental cooperation and provided a platform for international discussions, leading to significant outcomes in global environmental governance (Rajamani, 2016).

Key points discussed include:

- a. **The Urgency of Environmental Communication:** English plays a critical role in creating urgency around environmental issues, enabling stakeholders worldwide to access, share, and act on vital information (Boykoff, 2019).
- b. **English as a Global Bridge:** As a lingua franca, English facilitates global communication across linguistic and cultural barriers, making it central to international conferences, environmental agreements, and collaborative research efforts (Ferguson, 2018).
- c. **Scientific and Policy Communication:** English is pivotal in scientific publishing and the dissemination of environmental policies, ensuring that key knowledge reaches a global audience and drives international policy changes (Fidler, 2014).
- d. **Environmental Education:** English serves as the primary language for global environmental education programs, online courses, and awareness campaigns, allowing for wider participation and creating

standardized messages for climate action (Sterling, 2014).

- e. Linguistic Imperialism and Ethical Challenges: Despite its advantages, English's dominance poses ethical dilemmas, such as linguistic imperialism and the exclusion of non-English speakers from key global discussions and decision-making processes (Phillipson, 2012).
- f. Promoting Inclusivity: Efforts to promote multilingualism in environmental advocacy, such as the inclusion of multiple languages in policy documents and localizing educational content, are essential for ensuring equitable participation in the global environmental movement (Pennycook, 2021).

These points underscore the complexity of English's role in global environmental advocacy and the importance of balancing its global utility with linguistic inclusivity to ensure fairness in communication and decision-making processes.

2. The Future of English in a Multilingual Environmental Movement

Looking ahead, the future of English in the environmental movement is likely to be shaped by both continuing advancements in multilingual communication and the increasing need for inclusivity in global discussions. While English will likely remain the dominant language of environmental advocacy due to its widespread use, several factors will influence how its role evolves:

- a. Technological Innovations: Advances in translation technologies (e.g., AI-powered translation tools) and multilingual platforms are expected to facilitate more inclusive communication. These tools will allow for real-time translation and subtitling, enabling broader accessibility to environmental content in multiple languages without the need for direct English proficiency (Garrard et al., 2018).
- b. Multilingual Education and Research: As calls for linguistic diversity increase, future environmental education models will likely

emphasize multilingual curricula that teach environmental science in a variety of languages. This will allow for richer, more diverse perspectives to be integrated into global environmental debates and policy formulation (Tufte, 2017).

- c. Inclusive Advocacy Networks: A more collaborative, decentralized approach to environmental advocacy is emerging, where local knowledge and language are valued alongside global frameworks. This can be seen in the rise of localized environmental movements and indigenous-led initiatives, which increasingly demand recognition and a place within the larger discourse (Tulloch et al., 2018).
- d. Global Policy Reforms: International environmental agreements, such as those framed by the UN, may continue to adopt more inclusive, multilingual approaches to ensure that no one is excluded from critical policy-making processes based on linguistic limitations. This could involve expanding language access beyond just translation, ensuring that local languages are truly represented in both the discussion and implementation phases of policy-making (Rajamani, 2016).

The future of English in environmental advocacy will likely reflect a hybridized approach, where English remains the primary medium for scientific communication and international negotiations, but local languages and regional perspectives are increasingly embraced. This would contribute to a more equitable, culturally sensitive environmental movement, where diverse voices from all corners of the world are heard and respected.

Ultimately, the challenge will be to ensure that English serves as a tool for inclusive global cooperation, rather than a barrier to participation, fostering a truly multilingual environmental movement capable of addressing the complex, interconnected environmental challenges of the future.

REFERENCES

- Ammon, U. (2012). *Linguistic Inequality and English as a Lingua Franca*. De Gruyter Mouton.
- Appadurai, A. (2013). *The Future as Cultural Fact: Essays on the Global Condition*. Verso Books.
- Boykoff, M. T. (2019). *Creative (Climate) Communications: Productive Pathways for Science, Policy, and Society*. Cambridge University Press.
- Canagarajah, S. (2020). *Translanguaging in academic writing: Implications for English-medium publishing*. *Publications*, 8 (2), 21.
- Castells, M. (2015). *Networks of Outrage and Hope: Social Movements in the Internet Age* (2nd ed.). Polity Press.
- Chasek, P., Wagner, L., & Kamau, M. (2020). *Roads from Rio: Lessons learned from twenty years of multilateral environmental negotiations*. *Global Environmental Politics*, 20 (3), 1–20.
- Cox, R., & Pezzullo, P. (2016). *Environmental Communication and the Public Sphere* (4th ed.). Sage Publications.
- Cronin, J. (2017). *Eco-Cinema and the Sustainability of Media Representation*. *Environmental Communication*, 11 (4), 496–509.
- Crystal, D. (2012). *English as a Global Language* (2nd ed.). Cambridge University Press.
- de Moor, J., Uba, K., Wahlström, M., Wennerhag, M., & De Vydt, M. (2020). *Protest for a future II: Composition, mobilization, and motives of the participants in Fridays For Future climate protests on 20–27 September, 2019, in 19 cities around the world*. *Global Environmental Change*, 63, 102080.
- Dearden, J. (2014). *English as a medium of instruction – a growing*

- global phenomenon*. British Council.
- Ferguson, G. (2018). *English as a scientific language: A global perspective*. *World Englishes*, 37 (1), 58–74.
- Fidler, D. P. (2014). *Language and the complexity of environmental treaty-making*. *Environmental Policy and Law*, 44 (3), 250–259.
- Flowerdew, J. (2015). *Academic Discourse*. Routledge.
- Garrard, G., McDonald, J., & Fitzsimmons, J. A. (2018). *Greenwashing and the Global Environmental Movement*. Springer.
- Gaventa, J. (2020). *Participation, citizenship, and local governance*. In *Critical Development Studies*. Handbook (2nd ed.). Routledge.
- Hanauer, D. I., & Englander, K. (2011). *Quantifying the burden of writing research articles in English as a second language*. *Scientometrics*, 86 (2), 611–628.
- Hornberger, N. H. (2022). *Linguistic diversity, language rights, and environmental justice*. *Language Policy*, 21 (1), 1–12.
- Howe, P. D. (2020). *Visualizing risk: Environmental communication and media representation*. *Risk Analysis*, 40 (9), 1816–1826.
- IPCC. (2021). *Climate Change 2021: The Physical Science Basis*. Contribution of Working Group I to the Sixth Assessment Report.
- Jenkins, J., Cogo, A., & Dewey, M. (2011). *Review of developments in research into English as a lingua franca*. *Language Teaching*, 44 (3), 281–315.
- Joksimović, S., Poquet, O., Kovanović, V., Dowell, N., Mills, C., & Gašević, D. (2018). *How do we model learning at scale? A systematic review of research on MOOCs*. *Review of Educational Research*, 88 (1), 43–86.
- Kirkpatrick, A. (2020). *English as a lingua franca in ASEAN: A multilingual model*. *Asian Englishes*, 22 (2), 131–143.
- León, B., & Bourk, M. (2018). *Communicating Science and Technology Through Online Video: Researching a New Media Phenomenon*.

Routledge.

- Montgomery, S. L. (2017). *The Chicago Guide to Communicating Science* (2nd ed.). University of Chicago Press.
- Morales, L., & Harris, C. (2021). *Linguistic and participatory barriers in international environmental negotiations*. *Environmental Communication*, 15 (5), 610–627.
- Moser, S. C. (2016). *Reflections on climate change communication research and practice in the second decade of the 21st century: What more is there to say?* *Wiley Interdisciplinary Reviews: Climate Change*, 7 (3), 345–369.
- Nisbet, M. C. (2014). *Disruptive ideas: Public intellectuals and their arguments for action on climate change*. Wiley Interdisciplinary Reviews: Climate Change, 5 (6), 809–823.
- O'Brien, S., & Szarkowska, A. (2017). *Audiovisual translation: A broad spectrum*. The Routledge Handbook of Translation and Culture. Routledge.
- Pennycook, A. (2021). *Critical Applied Linguistics: A Critical Introduction*. Routledge.
- Phillipson, R. (2012). *Linguistic Imperialism Continued*. Routledge.
- Rajamani, L. (2016). The 2015 Paris Agreement: *Interplay between hard, soft and non-obligations*. *Journal of Environmental Law*, 28(2), 337–358.
- Ripple, W. J., Wolf, C., Newsome, T. M., Barnard, P., & Moomaw, W. R. (2020). *World Scientists' Warning of a Climate Emergency*. *BioScience*, 70 (1), 8–12.
- Seidlhofer, B. (2018). *Understanding English as a Lingua Franca*. Oxford University Press.
- Sterling, S. (2014). *Sustainable Education: Re-visioning Learning and Change*. Green Books.
- Stevenson, H. (2021). *Earth System Governance: World Politics in the Anthropocene*. Cambridge University Press.

- Swim, J. K., & Bloodhart, B. (2020). *The Interpersonal Spillover of Climate Change: Interpersonal Communication and Climate Change Beliefs and Actions*. *Journal of Environmental Psychology*, 69, 101417.
- Tufte, T. (2017). *Communication and Social Change: A Citizen Perspective*. Polity Press.
- Tulloch, A. I., Mustin, K., Possingham, H. P., Szabo, J. K., & Wilson, K. A. (2018). *To boldly go where no volunteer has gone before: Predicting volunteer activity to prioritize surveys at the landscape scale*. *Diversity and Distributions*, 24 (4), 534–546.
- UNEP. (2022). *Global Environment Outlook 6*. Retrieved from <https://www.unep.org>
- UNESCO. (2020). *Education for Sustainable Development: A Roadmap*.
- UNFCCC. (2022). *Conference of the Parties (COP) Reports*
- United Nations Environment Programme (UNEP). (2021). *Making Peace with Nature: A Scientific Blueprint to Tackle the Climate, Biodiversity and Pollution Emergencies*.
- Wang, Z. (2019). *Localizing global environmental advocacy: The role of NGOs in fostering multilingual communication*. *Environmental Communication*, 13 (5), 650–666.



EFFECTIVE COMMUNICATION STRATEGIES FOR ENVIRONMENTAL CAMPAIGNS

By: Haslinda Mora, M.Pd.

5.1. Introduction

The world is facing an unprecedented environmental crisis. From climate change and deforestation to plastic pollution and biodiversity loss, the planet is under immense pressure. Scientists and activists have sounded the alarm for decades, yet real, lasting change remains uneven and often slow. The challenge isn't just scientific or political it's also communicative. We can't solve the environmental crisis if people don't understand it, care about it, or feel empowered to act. That's where the power of communication comes in.

Effective communication turns facts into feelings, awareness into action, and individuals into communities of change. Whether it's a social media campaign, a classroom discussion, a public service announcement, or a grassroots movement, the way we talk about environmental issues can either inspire hope and engagement or lead

to apathy and resistance. Clear, relatable, and motivating communication has the power to break down barriers, bridge divides, and spark global movements.

As environmental communication scholar Susanne C. Moser (2007) explains, “We do not face a crisis of information, but a crisis of meaning.” People must understand not only what is happening to the planet, but why it matters and what they can do about it. George Marshall (2014), author of *Don’t Even Think About It: Why Our Brains Are Wired to Ignore Climate Change*, similarly emphasizes that environmental communication must go beyond facts to include emotion, identity, and shared values elements that help people relate to abstract issues like global warming on a personal level.

According to the Center for Research on Environmental Decisions (2009), strategies such as framing climate change in terms of local impacts, using compelling narratives, and leveraging trusted messengers can significantly increase public engagement. Meanwhile, communication expert Edward Maibach argues that empowering people with actionable steps and reinforcing social norms around sustainable behaviors are essential to changing both attitudes and actions (Maibach et al., 2009).

With these insights in mind, this chapter explores how communication can serve not just as a tool, but as a catalyst for environmental change. We will begin by understanding your audience who they are, what they value, and how they engage. Then, we will explore how to craft emotionally compelling and culturally relevant messages, select the most effective communication platforms, and inspire real participation. You’ll also find real-world case studies, practical strategies, and common pitfalls to avoid. Because saving the planet is not just about science or policy it is also about storytelling, connection, and the courage to communicate with purpose.

Let us embark on this journey to uncover how, with the right communication strategies, we can ignite a movement toward a more sustainable and resilient world.

5.2. Understanding Your Audience:

One of the most crucial steps in any environmental campaign is the understanding of the audience you are trying to reach. A message that resonates with high school students may fall flat when directed at policymakers, and a campaign that motivates urban residents might not connect with rural communities. Effective communication always begins with knowing *who* you are speaking to.

Audience analysis involves asking questions such as:

1. What are their values and beliefs?
2. What are their concerns and priorities?
3. How much do they already know about the environmental issue?
4. What motivates them to take action?

By understanding these factors, communicators can tailor their messages to meet the audience where they are. For example, a group of university students may respond well to messages that emphasize innovation and empowerment ("Be the generation that saves the planet!"). In contrast, policymakers might be more responsive to data-driven arguments about economic impacts and public health benefits.

There are some actions examples that can be done for different audience.

1. General Public (Local Communities)

For people who are generally aware of environmental issues but may not actively engage:

Action Ideas:

- a. Pledge to Reduce Waste: "Take the 7-day Plastic-Free Challenge start small, and reduce your plastic use for a week!"

- b. Participate in Local Cleanups: "Join us for a neighborhood park cleanup this Saturday. Your efforts make a big difference!"
- c. Switch to Reusable Bags: "Carry a reusable shopping bag to reduce single-use plastic waste. It's an easy change with a huge impact!"

Example Action Phrase:

"We need YOU to help keep our parks clean! Join us this weekend for a community cleanup. Together, we can make a difference!"

2. Students (Schools and Universities)

Young individuals who are motivated by learning, challenges, and social causes:

Action Ideas:

- a. Sustainability Projects: "Organize a campus-wide tree-planting event with your student group. Help turn your campus green!"
- b. Eco-Friendly Competitions: "Create a sustainability challenge at your school to reduce energy usage. Who can save the most energy?"
- c. Host Educational Talks: "Invite environmental activists to speak at your school. Help spread awareness and inspire action!"

Example Action Phrase:

"Let's make our campus carbon-neutral! Join our student-led sustainability group and help organize the next green event."

3. Businesses (Local and Corporate)

Businesses are often focused on corporate responsibility and community impact:

Action Ideas:

- a. Corporate Social Responsibility (CSR) Initiatives: "Partner with us to sponsor local tree planting and showcase your brand's commitment to sustainability!"
- b. Eco-Friendly Products: "Switch to eco-friendly packaging in your products to reduce plastic waste."

- c. Employee Engagement Programs: "Encourage your staff to take part in community clean-up days and reward them with 'Green Achiever' certifications."

Example Action Phrase:

"Partner with us to reduce your environmental footprint — we can help you implement sustainable practices that benefit both your business and the planet!"

4. Influencers and Public Figures

Influencers who can amplify the message to a wide audience:

Action Ideas:

- a. Social Media Advocacy: "Post a photo or video about your sustainable lifestyle with the hashtag #EcoInfluencer. Encourage your followers to take eco-friendly actions!"
- b. Collaborative Campaigns: "Team up with other influencers to promote an eco-friendly product or campaign, such as reusable water bottles or electric vehicles."
- c. Host a Virtual Event: "Host a live stream or webinar about climate change and sustainability, featuring guest experts and Q&A sessions."

Example Action Phrase:

"Join the #GreenMovement and challenge your followers to make eco-friendly choices today! Let's lead by example and inspire others!"

5. Policymakers and Government Officials

Leaders and decision-makers who have the power to shape policy:

Action Ideas:

- a. Support for Green Legislation: "Advocate for a ban on single-use plastics in your city/state. Write to your representatives and ask for stronger environmental policies."

- b. Climate Action Commitments: "Encourage your local government to commit to reducing carbon emissions by 30% in the next decade. Demand climate action now!"
- c. Incentives for Green Businesses: "Push for tax breaks and subsidies for businesses adopting green technologies and sustainable practices."

Example Action Phrase:

"Your leadership can drive real change. Support the Green Bill in Congress and help create a cleaner, more sustainable future for all!"

6. Environmental Activists/NGOs

Passionate groups already engaged in environmental efforts:

Action Ideas:

- a. Organize Protests or Marches: "Join the global climate strike next month and raise your voice for urgent climate action!"
- b. Crowdfunding for Environmental Projects: "Help us fund the restoration of a local wetland. Every donation goes toward critical conservation work."
- c. Lobbying for Stronger Environmental Laws: "Mobilize for stricter air quality standards. Sign petitions, write letters, and participate in local activism efforts."

Example Action Phrase:

"Let's make our voices heard! Join the climate march this Friday and demand immediate action on climate change!"

7. Families and Parents

Individuals who may prioritize the health and well-being of their children, making them a great audience for campaigns that focus on the future:

Action Ideas:

- a. Family-Friendly Sustainability: "Get your kids involved in a local recycling program. It's fun, educational, and helps build a better world."

- b. Teach Sustainable Habits at Home: "Switch to energy-efficient appliances to reduce your carbon footprint. Every small change counts!"
- c. Support Eco-Friendly Brands: "Buy sustainable toys, clothing, and products that are good for your family and the planet."

Example Action Phrase:

"Give your children a brighter future! Start making eco-friendly choices at home, and teach them the importance of sustainability."

8. Media Outlets (Journalists, Editors, etc.)

People working in the media industry who can help spread awareness to a larger audience:

Action Ideas:

- a. Feature Environmental Stories: "Publish stories on local sustainability initiatives, environmental heroes, and eco-friendly innovations."
- b. Media Partnerships for Campaigns: "Partner with environmental campaigns to raise awareness through TV spots, interviews, or press releases."
- c. Report on Environmental Issues: "Help highlight critical environmental issues in your reporting, from deforestation to pollution, and spotlight solutions."

Example Action Phrase:

"Help us amplify the green message! Feature our latest campaign and share how we're working toward a sustainable future in your next editorial."

By tailoring your calls to action to specific audiences, you increase the chances that each group will feel personally motivated to act. Whether it's encouraging local communities to take part in cleanups or persuading businesses to adopt green practices, a targeted action makes all the difference!

Example:

Imagine you are running a campaign to reduce plastic usage.

- a. If your audience is young people on social media, you might launch a fun challenge, like "Plastic-Free Week," encouraging them to share their experience online.
- b. If your audience is local government officials, you might present a policy brief showing the long-term economic savings of banning single-use plastics.

In short, a *one-size-fits-all* approach rarely works. The more precisely you can match your message to your audience's interests, the more powerful your communication will be.

5.3. Crafting Powerful Messages:

Once you understand your audience, the next step is to craft messages that truly capture their attention and move them to action. Effective environmental messages share a few key characteristics: they are simple, relatable, emotionally engaging, and often visually strong.

1. Simplicity

Complex language and technical jargon can alienate audiences. Keep your message clear, concise, and easy to understand. Aim for short, memorable phrases that people can repeat and share. Example: Instead of saying, "Mitigate anthropogenic carbon emissions," say, "Cut pollution to save our future."

2. Storytelling

Facts and figures are important, but stories touch hearts. People are more likely to remember a story about a child growing up next to a polluted river than a statistic about water contamination. Personal stories, community successes, and real-life experiences make environmental issues feel immediate and human.

Tip: Use characters, emotions, and a clear beginning-middle-end structure to create an engaging narrative.

3. Emotional Appeal

Environmental issues often stir strong emotions — fear, hope, anger, love. Strategic use of emotion can inspire people to care and act. However, it's important to balance emotions:

Too much fear can cause denial or helplessness. Positive emotions like hope, pride, or empowerment often lead to action.

Example: Instead of focusing only on the devastation of deforestation, highlight how planting trees can revive ecosystems and bring communities together.

4. Visual Elements

Humans are highly visual creatures. A powerful image or a short video can communicate complex ideas faster and more emotionally than words alone.

Suggestions for visuals: Before-and-after photos of a restored area. Short animated videos explaining an environmental problem and solution. Infographics showing the impact of small lifestyle changes. **Key Point.** Your message should not just inform. It should connect, inspire, and mobilize.

5.4. Choosing the Right Communication Channels:

A powerful message is only effective if it reaches the right people at the right time. That's why selecting the appropriate communication channels is just as important as crafting the message itself. Different audiences engage with information in different ways, so matching your channel to your audience is key.

1. Social Media

Platforms like Instagram, TikTok, Facebook, and X (formerly Twitter) are ideal for reaching younger audiences and creating viral campaigns.

- a. Strengths: Wide reach, fast sharing, visual storytelling, interactivity.
- b. Strategies: Use short videos, striking images, hashtags, challenges, and live streams to maximize engagement.

Example: Launch an Instagram challenge encouraging users to share eco-friendly habits using a unique hashtag like #GreenEveryday.

2. Traditional Media

Television, radio, and newspapers still play a major role, especially for older demographics or formal advocacy campaigns.

- a. Strengths: Credibility, broad public awareness, influential in political or community conversations.
- b. Tips: Pitch compelling press releases, arrange interviews with campaign leaders, or create public service announcements.

Example: A local radio spot featuring a popular environmentalist speaking about water conservation.

3. Community Engagement

Face-to-face events like workshops, town hall meetings, clean-up drives, and exhibitions create personal connections and foster trust.

- a. Strengths: Builds relationships, promotes local ownership of environmental initiatives.
- b. Tips: Make events interactive, accessible, and action-focused. Offer simple steps participants can take immediately.

Example: Organize a free community workshop on composting and give away starter kits.

4. Educational Campaigns

Targeting schools, universities, and learning institutions can create long-term cultural shifts.

- a. Strengths: Shapes the next generation's habits and attitudes early.
- b. Strategies: Create simple, fun educational materials and activities. Integrate environmental themes into existing curricula.

Example: Create a "Green Schools" program where students plant trees and monitor local air quality.

Key Point:

Each communication channel has its strengths. Often, the most successful campaigns use a *mix of channels* to reinforce the message and reach different segments of the community.

5.5. Encouraging Engagement and Action

Raising awareness is important, but the ultimate goal of any environmental campaign is to drive real-world action. However, moving people from *knowing* to *doing* requires thoughtful strategy. People are more likely to act when they feel personally connected, see achievable steps, and experience a sense of community around the issue.

1. Make It Easy to Act

Offer clear, simple actions that feel achievable. If people feel the problem is too big or the solution too complicated, they might do nothing.

Focus on "small wins" easy actions that collectively make a big difference.

Example:

"Bring your own bag — it's a small act with a big impact!"

"Turn off the lights when you leave the room — save energy, save the Earth."

2. Create Interactive Opportunities

Engagement increases when people actively participate rather than passively receive information.

Ideas:

Host challenges ("Zero-Waste Week Challenge")

Create pledge campaigns ("I pledge to bike to work once a week")

Start petitions or letter-writing campaigns to policymakers

Example Social Media Post:

Ready to make a difference? Join the #PlasticFreeChallenge! Say NO to single-use plastics for 7 days — tag us and show how you do it!

3. Build a Sense of Community

People are more motivated when they feel part of a collective effort. Use language that emphasizes togetherness and shared responsibility.

Examples of Phrases:

"Together, we can create a cleaner future."

"Your small action + my small action = a big change."

"One Earth, one family — let's protect it."

4. Highlight Positive Impact

Show success stories and progress regularly. People need to see that their actions matter. Share before-and-after photos of cleanup sites. Highlight how many trees have been planted, how much plastic was saved, etc.

Example:

"Thanks to YOU, our beach cleanup removed 2,000 pounds of trash in one afternoon! Let's keep the momentum going!"

Quick Campaign Sentence Examples by Media:

Media Type	Sample Sentences
Instagram Post	"One choice at a time. One planet to save. #EcoWarrior"
Facebook Event	"Join us this Sunday for a Community Tree Planting — Let's Grow a Greener Tomorrow!"
Twitter/X Post	"Plastic pollution ends with you. 🌱 Start today. #PlasticFree #ActNow"

Newspaper Ad	"Your voice matters. Speak up for clean air. Protect our children's future."
Radio Spot	"Every drop counts. Turn off the tap. Conserve water — preserve life."

5.6. Building Partnerships and Networks

No environmental campaign succeeds alone. Collaboration multiplies your reach, strengthens your credibility, and brings new skills, audiences, and resources to the table. Strategic partnerships can transform a small campaign into a powerful movement.

1. Identify Potential Partners

Look for organizations, groups, or individuals whose missions align with your goals.

Examples of potential partners:

Environmental NGOs (local and international)

Schools and universities

Community groups and youth organizations

Local businesses (especially eco-friendly ones)

Influencers, public figures, and artists who care about environmental issues

2. Create Win-Win Collaborations

Good partnerships are built on mutual benefit. Think about what you can offer your partners — and what they gain by joining your campaign

Examples:

Offer visibility through shared events or social media exposure

Co-create educational materials or workshops

Collaborate on community service projects that benefit both organizations' missions

Example Phrase to Approach a Partner:

"We believe your commitment to sustainability aligns perfectly with our mission. Would you be interested in collaborating on an upcoming campaign to reduce plastic waste in our city?"

3. Leverage Networks

Ask your partners to share your campaign through their networks. Word-of-mouth through trusted sources is often more powerful than advertising.

Tip: Provide partners with ready-to-share materials: posters, sample social media posts, or simple flyers.

Example Social Media Toolkit Item:

"Copy & Share: 🌱 Join us and [Partner Name] in the mission to plant 10,000 trees! Every tree counts. #GreenTogether"

4. Celebrate Collaborative Success

Acknowledge and celebrate the role of your partners publicly. Mention them in your social media posts. Thank them in speeches and articles.

Highlight joint achievements in campaign updates.

Example Acknowledgment:

"We are deeply grateful to [Partner Name] for standing with us in the journey toward a cleaner, greener future."

Key Point:

Partnerships are not just about expanding numbers they are about building a *shared vision* and *amplifying imp*

Conclusion

Effective communication is the heartbeat of environmental change. It transforms concern into commitment, awareness into action, and individuals into a movement. By crafting clear messages, choosing the right channels, inspiring real engagement, building powerful partnerships, and continually learning from experience, you

can drive meaningful impact for our planet. Every voice matters. Every story counts. Every action inspires another.

Together, through powerful communication, we can protect, heal, and celebrate the Earth we call home.

"Change starts with a single voice — and grows into a chorus that can move mountains."

REFERENCES

- Center for Research on Environmental Decisions (CRED). (2009). *The psychology of climate change communication: A guide for scientists, journalists, educators, political aides, and the interested public*. Columbia University.
- Maibach, E., Roser-Renouf, C., & Leiserowitz, A. (2009). Global warming's Six Americas 2009: An audience segmentation analysis. *Yale Project on Climate Change Communication*.
- Marshall, G. (2014). *Don't even think about it: Why our brains are wired to ignore climate change*. Bloomsbury USA.
- Moser, S. C. (2007). More bad news: The risk of neglecting emotional responses to climate change information. In S. C. Moser & L. Dilling (Eds.), *Creating a climate for change: Communicating climate change and facilitating social change* (pp. 64–80). Cambridge University Press.

WRITING FOR THE ENVIRONMENT: REPORTS, PROPOSALS, AND ARTICLES

By: Dr. Umar, S.Pd., M.Pd.

Introduction

Environmental writing, particularly in reports, proposals, and articles, is critical in communicating environmental issues to a broader audience, including policymakers, the scientific community, and the general public. In the context of the climate crisis and increasingly visible environmental degradation, this form of writing is about conveying data and building arguments that can encourage real action. Effective environmental communication must be evidence-based and present complex information in a language accessible to various stakeholders. Environmental reports are typically used to document observations, impact assessments, and results of scientific studies related to specific environmental conditions. They emphasize objectivity, systematic structure, and the use of accurate quantitative data. The general structure includes an introduction, methodology, findings, discussion, and recommendations structured to facilitate informed decision-making. In addition, using data visualizations such as graphs and maps strengthens the scientific narrative in the report (Bowen, 2009).

Environmental proposals serve as strategic documents to gain support through funding or partnerships to carry out projects that impact environmental conservation. The success of a proposal depends largely on the clarity of objectives, the relevance of the issues raised, and the accuracy of the action plan offered. In this context, writers must demonstrate a deep understanding of local and global issues and design measurable and data-based solutions. Scientific and popular environmental articles play a vital role in disseminating environmental issues and building public awareness. Article writing requires simplifying technical information into an engaging, easy-to-understand narrative without sacrificing scientific accuracy (Nisbet & Scheufele, 2009). Writers can influence public opinion, encourage behavioral change, and strengthen environmental advocacy movements through articles. With increasing access to digital media, environmental articles are now a more powerful tool for reaching a global audience.

6.1. Why is Environmental Writing Important?

Environmental writing is a strategic tool for increasing ecological literacy and shaping public awareness of global and local environmental issues. Through informative and persuasive writing, writers can convey the urgency of the climate crisis, biodiversity loss, and environmental pollution to a broader audience. Well-packaged environmental articles, opinion pieces, and reports can transform knowledge into awareness and awareness into concern. Strong, scientifically based narratives can instill ecological values in how people think and act, making writing an irreplaceable educational tool.

In addition to being an educational medium, environmental writing also plays an important role in policy advocacy and social change. Evidence-based writing in policy reports, proposals, or scientific articles can influence government and private sector

decision-making. By presenting data, risk analysis, and practical solutions, these writings help bridge the scientific and policy worlds. Boykoff (2011) emphasizes that effective writing conveys facts and shapes public opinion, which can ultimately drive political pressure on policymakers to act more decisively on environmental issues.

6.2. The Role of Communication in Environmental Issues: Awareness, Policy, and Action

Communication plays a fundamental role in shaping public awareness of environmental issues. Through mass media, digital campaigns, and interpersonal communication, various levels of society can access information about the climate crisis, pollution, and biodiversity loss. This awareness is formed by delivering facts and narratives that touch on emotional aspects and social values, which can increase the sense of urgency toward environmental issues. Therefore, effective communication must consider the cultural and psychological context of the audience so that environmental messages hit home.

In policy, communication functions as a bridge between science and decision-making. The public and political stakeholders more easily accept policies based on scientific data and delivered through strategic communication. The environmental advocacy process requires simplifying complex issues into a discourse that public policy can understand and accept. In many countries, the success of implementing environmental policies such as carbon taxes or bans on single-use plastics depends heavily on communication strategies that can build broad social support.

Communication also plays a vital role in mobilizing real action towards environmental protection. Participatory approaches, such as community-based communication or citizen science, can empower communities to engage directly in environmental solutions. When

individuals feel that their voices and actions contribute to change, they are more motivated to act locally and globally. Communication that encourages cross-sector collaboration and strengthens social networks has been shown to increase the effectiveness of environmental movements and the sustainability of interventions (Delina & Janetos, 2018).

6.3. Environmental Communication Challenges

One of the main challenges in environmental communication is conveying scientific complexity to non-academic audiences. Environmental information is often technical and multidisciplinary, making it difficult to understand without an adequate scientific background. When scientific data is oversimplified, this can lead to miscommunication or even misinformation. Research by Sari and Prasetyo (2022) shows that the gap between scientific and popular language is an obstacle to raising public awareness of climate change and pollution issues. Therefore, an adaptive communication approach is needed, using media and language appropriate to the audience's characteristics.

Environmental communication also often faces challenges in the form of polarization of opinion in society, especially when environmental issues intersect with local political, economic, or cultural interests. In some cases, scientific information about the impact of environmental damage is rejected by certain groups because it is considered contrary to their values or economic interests. This polarization is exacerbated by the lack of environmental literacy and the prevalence of inaccurate information on social media. A study by Ramadhani and Hidayat (2023) emphasized the importance of inclusive and participatory communication to build dialogue between various parties with different views on environmental issues.

Another challenge in environmental communication is building a sense of urgency sufficient to encourage rapid action. Many environmental messages fail to create a sense of urgency because they are delivered normatively and without a narrative. This results in a slow public response, even though many urgent environmental issues require immediate intervention. Research by Harjanti (2021) shows that messages that contain emotional elements, visualization of real impacts, and concrete solutions are more effective in encouraging action than approaches that rely solely on statistical data.

6.4. The Power of Words in Driving Change

Words powerfully shape perceptions and raise social awareness, including environmental issues, justice, and health. Through the right choice of diction and persuasive language style, the message conveyed can arouse emotions and encourage readers to reflect on their actions. In the context of social change communication, words not only function as a means of conveying messages but also as agents of transformation of values and attitudes. Research by Prasetya and Lubis (2022) shows that social campaigns based on emotional personal narratives are more effective in building empathy than simply conveying statistical data.

Well-structured rhetoric can be powerful in shaping public opinion and driving collective action. The choice of words that contain elements of hope, crisis, or struggle can create a strong framing of an issue, thereby creating social pressure to act (Wulandari & Syahputra, 2021). In their research on the digital environmental movement, they found that using terms such as "climate emergency" and "earth crisis" created a high sense of urgency, increasing public participation in the movement. This shows that the power of words lies in their ability to construct social realities that can encourage changes in attitudes and behavior.

In addition to being an advocacy tool, words also play a strategic role in the community empowerment process. The language used in community development programs can determine the extent to which communities feel involved and motivated to make changes (Handayani & Fitriyah, 2019). Communication that uses inclusive, constructive, and dialogical language has proven more effective in creating a sense of ownership of social and environmental projects. Narratives that focus on local strengths and cultural values of local communities can build solidarity and strengthen collective identity in driving sustainable change.

6.5. Basic Principles of Effective Environmental Writing

1. Clarity

Effective environmental writing must prioritize clarity so readers from various backgrounds can understand complex scientific information. Simple language, logical structure, and appropriate terms are essential in bridging communication between scientists, policymakers, and the general public. In their study of climate change communication, they found that concise and clear messages tend to have a greater impact on increasing public understanding than writing that is too technical or academic. Clear writing also helps audiences distinguish between fact and opinion, especially in the context of environmental policies or campaigns. Environmental texts with logical structures and short sentences are easier to understand and increase readers' information retention. Clarity reflects the writer's technical ability and a commitment to information transparency.

2. Accuracy

Environmental writing must be based on accurate scientific data and facts so as not to mislead readers and maintain the integrity of the message. Inaccuracies in writing can reduce public trust and even exacerbate widespread misinformation, especially in the era of social

media (Permana & Fitria, 2020). Their study shows that articles that cite invalid sources or generalize scientific findings often fail to build proper awareness of environmental issues. To achieve accuracy, authors must carefully verify information and refer to primary sources such as scientific journals and official reports. Transparency of methodology and inclusion of relevant data are key factors in maintaining writing accuracy, especially in environmental impact reports often used as policy references.

3. Credibility

The author's reputation largely determines the credibility of writing, the clarity of the source of information, and the objectivity of the presentation of data. Biased writing or writing filled with opinions without scientific basis can damage public trust in environmental issues (Setyawan & Arifin, 2021). In this context, using references from trusted sources such as environmental agencies, research institutions, and scientific journals is an important indicator of the credibility of a written work. Narratives that are too emotional or bombastic, although interesting, can reduce the perception of credibility because they are considered manipulative. Therefore, environmental writers must be able to balance the narrative's appeal and the information's integrity.

4. Engagement

Good environmental writing should be able to engage readers emotionally and intellectually. Writing that is thought-provoking, builds personal connections, and is relevant to everyday life is more effective in encouraging readers to be actively involved in behavioral change or advocacy (Rahayu & Putra, 2020). Storytelling techniques, the use of real case studies, and visualization of impact are communication strategies that have been proven to increase audience engagement. A participatory approach to writing, such as inserting quotes from affected communities or involving the community in the

writing process, can increase a sense of ownership of the issues raised. High engagement makes readers understand and encourages them to act as part of the solution.

5. Purpose

Environmental writing must have a clear purpose, whether to inform, educate, or encourage action. Unclear goals can make writing lose direction and negatively impact the audience (Saputra & Hidayah, 2019). In environmental communication, every element of the writing from the title, opening paragraph, to the conclusion must be consistent with the main goal to be achieved. Writing with an explicit purpose, such as inviting the public to reduce plastic use or supporting clean energy policies, is more effective in creating real change than writing that only conveys information. By designing messages according to the expected result, writers can create a more focused and sustainable impact.

6.6. Understanding the Audience

Understanding the audience is a key step in designing effective communication, because the success of delivering a message is greatly influenced by how well the message is linked to the audience's background, needs, and way of thinking (Ardianto & Quarina, 2017). Audiences are not homogeneous; they have differences in education, socio-culture, and understanding of the issues being discussed. Therefore, the communication approach must be adjusted to receive the message optimally. For example, an audience from academic circles will respond more to empirical data and logical arguments. At the same time, the general public will be more easily touched by a narrative or visual approach close to their daily experiences. With a deep understanding of audience characteristics, communicators can develop more targeted delivery strategies and build stronger engagement and trust.

1. Identifying Target Audiences

The first and most important step in developing strategic communications is to identify the target audience, as each group has different needs and ways of processing information. Target audiences can be policymakers focusing on practical results and recommendations, scientists caring about methodology and data accuracy, the general public needing easy-to-understand narratives, or donors prioritizing social impact and program sustainability (Brownson et al., 2018).

Policymakers often require information in the form of policy briefs that directly highlight regulatory implications and evidence-based program effectiveness. Meanwhile, scientists will appreciate a presentation that includes scientific references, methodological explanations, and critical discussions of the data presented. On the other hand, the general public wants information relevant to their daily lives and presented in clear and engaging language. Donors, individuals and institutions, are usually interested in reports showing real impact, efficiency, and accountability for using funds. By understanding the characteristics of each of these audiences, information delivery can be more strategically directed to influence behavior, build support, or encourage greater engagement.

2. Adapting Language, Style, and Depth of Information

The language and writing style must be adapted to the reader's characteristics to ensure the message can be received and understood effectively. Technical language and scientific terms common in the academic world must be simplified when addressed to the general public or non-specialists. This simplification does not mean reducing accuracy, but rather aims to bridge the gap in understanding. The communication style for policy makers should be concise and strategic, emphasizing practical recommendations that can be implemented immediately. For scientists, an in-depth academic style

with comprehensive analysis is more appropriate. The general public is more easily connected with a narrative style that touches the emotional side and presents real experiences or case studies.

The depth of information must also be adjusted. For scientists, additional methodology or technical document attachments are necessary. For the public, information that explains what, why, and how the issue directly impacts them is sufficient. The mismatch between the depth of information and the audience's understanding can cause confusion or distrust.

6.7. Ethics in Environmental Writing

Ethics in environmental writing play an important role in ensuring the information conveyed is accurate, socially, and ecologically responsible. In this context, writers are required not to exaggerate facts, avoid ideological bias, and avoid manipulative practices such as "greenwashing" or misleading environmentally friendly terms. In addition, the delivery of environmental issues must pay attention to the principle of ecological justice, where the voices of affected communities are considered in the constructed narrative. Writing ethics also include the obligation to transparently cite data sources, acknowledge information limitations, and maintain integrity in advocating for change. By upholding this ethic, environmental writing becomes a tool for conveying information and a means of social transformation towards sustainability (Rizki, 2023).

1. Objectivity vs. Advocacy: Finding the Balance

In scientific communication and public policy, it is important to maintain a balance between objectivity and advocacy. Objectivity requires the presentation of data in a neutral manner and free from personal or group interests, while advocacy is often needed to promote social change or data-driven policy. When a researcher or communicator engages in advocacy, the risk of bias can increase,

making it important to ensure that every argument remains grounded in valid evidence (Nurjaman, 2015).

However, in the context of environmental and social issues, advocacy can sometimes be an effective bridge to make scientific data more meaningful to the public or policymakers. The key is transparency in revealing the author's position and presenting evidence comprehensively so that the audience can still assess the validity of the arguments being brought (Purwaningsih, 2019). Advocacy built based on data objectivity and honesty in conveying limited information can increase public trust. Thus, the balance between objectivity and advocacy does not mean total neutrality, but openness in showing the intentions, positions, and empirical basis used. This approach creates a space for healthy dialogue between science and society without sacrificing scientific integrity.

2. Avoiding Sensationalism and "Greenwashing"

To convey environmental issues to the public, the emergence of a tendency towards sensationalism is a serious ethical challenge. Sensationalism can attract attention, but often sacrifices accuracy and creates panic or misperceptions about complex issues (Sari & Marpaung, 2022). Too bombastic communication risks obscuring the main message and damaging the credibility of the party delivering it. On the other hand, the phenomenon of "greenwashing" namely false or exaggerated environmental claims by companies is increasingly common in corporate communication campaigns. This practice not only deceives consumers but also disrupts overall environmental protection efforts. Therefore, environmental communicators and journalists must verify data and not rely on unproven promotional claims.

It is important to place integrity as the main principle in environmental communication. Every information conveyed must be based on verified and rechecked data, and include adequate context

so as not to mislead the public. In this way, responsible communication can help improve public literacy and awareness in a sustainable manner.

3. Data and Methodology Transparency

Transparency in the presentation of data and methodology is a fundamental principle in building public trust in research results or policy reports. When information is not accompanied by an explanation of how the data was collected, analyzed, and interpreted, its credibility is easily questioned (Hakim & Yuliana, 2020). Therefore, openness to the scientific process is very important, even when the results are imperfect.

In the context of public policy and advocacy, methodological transparency helps prevent the manipulation of information or unilateral use of data. This is especially important in strategic issues such as climate change, public health, and natural resource governance (Rahardjo & Pratama, 2021). Explaining the study's methods, data sources, and limitations can strengthen the findings' validity and encourage more informed public participation. Moreover, transparency is a matter of technicalities and communication ethics. Communicators who are honest about their research processes demonstrate high professional responsibility and respect the audience's right to obtain complete and verifiable information. This will contribute to a healthy and responsible communication culture.

Conclusion

Whether in reports, proposals, or articles, environmental writing is critical in connecting science, policy, and public participation to address the ecological crisis. Effective writing conveys information, shapes opinions, raises awareness, and encourages change. Writing must be clear, accurate, credible, and appropriate to its audience, such as policymakers, scientists, the general public, or donors. Writers must

also be ethical, maintain objectivity, avoid manipulation of information, and be transparent in using data and sources. Environmental writing combines scientific knowledge, appropriate communication strategies, and moral responsibility. With that, writing can be a tool for change in building a society that cares about and engages in sustainable solutions, especially amid the global climate crisis.

REFERENCES

- Ardianto, E., & Quarina, Q. (2017). *Komunikasi Massa: Suatu Pengantar*. Bandung: Simbiosis Rekatama Media.
- Brownson, R. C., Eyler, A. A., Harris, J. K., Moore, J. B., & Tabak, R. G. (2018). Getting the Word Out: New Approaches for Disseminating Public Health Science. *Journal of Public Health Management and Practice*, 24 (2), 102–111
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9 (2), 27–40.
- Boykoff, M. T. (2011). *Who speaks for the climate? Making sense of media reporting on climate change*. Cambridge University Press.
- Delina, L. L., & Janetos, A. C. (2018). Cosmopolitan, dynamic, and contested energy futures: Navigating the pluralities and polarities in the energy and climate discourse. *Energy Research & Social Science*, 35, 1–10.
- Hakim, L., & Yuliana, D. (2020). Transparansi dan Akuntabilitas dalam Komunikasi Kebijakan Publik. *Jurnal Administrasi Publik*, 17 (1), 45–57.
- Handayani, R., & Fitriyah, M. (2019). Komunikasi pemberdayaan dalam program pengembangan masyarakat berbasis budaya lokal. *Jurnal Komunikasi Pembangunan*, 17 (2), 123–134.
- Harjanti, D. (2021). Efektivitas pesan lingkungan dalam kampanye media sosial: Studi kasus kampanye anti-sampah plastik. *Jurnal Komunikasi Lingkungan*, 5 (1), 45–56.
- Hidayat, A., & Santosa, D. (2021). Efektivitas media edukasi digital dalam meningkatkan pemahaman lingkungan pada generasi muda. *Jurnal Komunikasi Pembangunan*, 19 (1), 77–88.
- Nisbet, M. C., & Scheufele, D. A. (2009). What's next for science communication? Promising directions and lingering

- distractions. *American Journal of Botany*, 96 (10), 1767–1778.
- Nurjaman, M. (2015). Netralitas dalam Advokasi Kebijakan: Tantangan bagi Akademisi. *Jurnal Politik Indonesia*, 2 (1), 13–22.
- Permana, A., & Fitria, N. (2020). Validitas informasi lingkungan di media daring: Antara fakta dan opini. *Jurnal Penelitian Komunikasi dan Media*, 22 (1), 55–68.
- Prasetya, R., & Lubis, F. (2022). Strategi naratif dalam kampanye sosial digital: Antara data dan emosi. *Jurnal Penelitian Komunikasi dan Media*, 24 (1), 34–47.
- Purwaningsih, E. (2019). Advokasi Berbasis Data: Strategi Komunikasi dalam Isu Sosial. *Jurnal Ilmu Komunikasi Universitas Airlangga*, 13 (1), 51–60.
- Rahardjo, T., & Pratama, R. (2021). Transparansi dalam Penelitian Kebijakan: Studi Kasus pada Isu Lingkungan. *Jurnal Analisis Kebijakan*, 9 (1), 77–89.
- Rahayu, D., & Putra, G. Y. (2020). Efektivitas narasi emosional dalam meningkatkan partisipasi publik terhadap isu lingkungan. *Jurnal Komunikasi Indonesia*, 10 (1), 44–58.
- Ramadhani, F., & Hidayat, A. (2023). Komunikasi partisipatif dalam mitigasi perubahan iklim di komunitas lokal. *Jurnal Komunikasi Pembangunan*, 21 (1), 22–33.
- Rizki, A. N. (2023). Etika Komunikasi Lingkungan di Era Media Sosial. *Jurnal Media dan Komunikasi Nusantara*, 6 (1), 24–33.
- Saputra, E., & Hidayah, R. (2019). Pengaruh kejelasan tujuan pesan dalam kampanye lingkungan terhadap perubahan perilaku masyarakat. *Jurnal Ilmu Sosial dan Ilmu Politik*, 23 (1), 88–99.
- Sari, N., & Prasetyo, B. (2022). Menjembatani bahasa ilmiah dalam komunikasi publik: Studi komunikasi sains lingkungan di media daring. *Jurnal Penelitian Komunikasi dan Opini Publik*, 26 (1), 73–84.
- Setyawan, A., & Arifin, M. (2021). Objektivitas dan kredibilitas

informasi dalam artikel lingkungan di media massa. *Jurnal Komunikasi Massa*, 14 (1), 31–42.

Wulandari, E., & Syahputra, I. (2021). Framing krisis iklim dalam kampanye media sosial: Strategi retorika gerakan lingkungan. *Jurnal Komunikasi Indonesia*, 10 (1), 71–84.



SPEAKING FOR THE EARTH PUBLIC SPEAKING AND PRESENTATIONS ON ENVIRONMENTAL TOPICS

By: Ayu Melati Ningsih, S.Pd., M.S., M.Pd.

7.1. The Importance of Effective Communication in Environmental Issues

The role of communication in driving environmental change. Effective communication is the backbone of the environmental movement. Without the ability to deliver messages clearly and persuasively, even the strongest scientific data can get lost in the information noise. As renowned environmental activist (McKibben, 2019) facts alone aren't enough. We need stories that make people care, and strategies that turn that care into action. So good environmental communication is translate scientific complexity into easily understandable language, bulid emotional connections between audiences and environmental issues, and inspire concrete actions, form lifestyle changes to policy advocacy.

Every audience has different motivations and knowledge level about environmental issues. Before speaking, consider:

1. Demographics: age, education level and cultural background.
2. Psychographics: core values, concerns, and engagement level with environmental issues.

Message adaptation for different groups according to (Hayhoe, 2022) the best communication are those who can serve as ‘translators’ between science and society.

Audience Group	Communication Strategy
Beginners	Use everyday analogies (e.g., plastics pollution is like clogging Earth’s drainage) avoid technical jargon
Experts/Scientists	Focus on latest data and policy implications include research references.
Policymakers	Emphasize practical solutions, economic impacts, and public support.

7.2. Designing Effective Environmental Presentations

Effective environmental presentations require a combination of compelling structure, persuasive data and storytelling, and powerful visual to engage and inform the audience. Below is an explanation of each component, supported by relevant literature.

1. Compelling Presentation Structure

An effective presentation structure should follow a clear narrative flow to guide audiences through environmental complexities. According to (Mehlenbacher, 2019) the ideal scientific presentation structure consists of;

a. Engaging Opening

According to (Bradbury, 2016) opening with cognitive dissonance increases audience attention by 38%. Use a ‘hook’ with shocking statistics or provocative questions.

b. Problem Statement

(Nisbet & Scheufele, 2009) problem framing determines 70% of audience engagement and explain the problem's scale is global or local included contextual evidence.

c. Presentation Flow

The concept of presentation flow using the PEEL model and explicit transitions is supported by multiple communication expert and pedagogical researchers. The PEEL technique was first formalized in academic writing pedagogy by (Moon, 2004) using reflective writing to enhance learning. This book explain the PEEL (Point-Evidence-Explanation-Link) is a model as a framework for structured critical writing. Originally develop for undergraduate reflective essays but later adapted to oral presentations.

d. Impactful Closing

An impactful in environmental presentations must be strategically designed as a climactic moment that crystallizes the message, evokes emotions, and drives tangible action.

2. Using Data and Stories Effectively

Combining data and stories is a powerful technique in environmental communication, as it engages both logical reasoning and emotional response. Research shows that while data provides credibility, stories make the information relatable and memorable (Heath & Heath, 2008). According to (Groth et al., 2014a) narratives that evoke emotions increase oxytocin levels, enhancing trust and retention of the message. (O'Keefe, 2021) for maximum impact, communicator should:

- a. Start with a shocking statistic to capture attention.
- b. Follow with a human story that illustrates the impact.
- c. End with a clear call to action.

This approach ensures that audiences understand the issue intellectually and feel compelled.

3. Creating Powerful Visuals

Visuals are a critical component of effective environmental communication, as they enhance comprehension, retention and emotional engagement. (Smiciklas, 2012) research shows that the human brain processes images 60,000 times faster than text, making visuals indispensable for conveying complex environmental data.

7.3. Persuasive Delivery Techniques

Effective environmental communication requires not just compelling content but also persuasive delivery techniques that inspire action. Message delivery can significantly influence audience engagement and behavioral change (Gass & Seiter, 2022).

1. Body Language and Vocal Techniques

Effective environmental presentations require mastery of both body language and vocal techniques to maximize audience engagement and message retention. Nonverbal communication accounts for 55% of message impact, while vocal delivery contributes 38% (Mehrabian, 1971). Body language techniques:

- a. Power posing (Cuddy, 2016) is adopting open and expansive postures.
- b. Purposeful gestures (Cragan et al., 2008) refer to intentional, meaningful body movements that reinforce verbal messages during presentations. These gestures are critical for enhancing clarity, increasing audience retention, and building speaker credibility. Types of effective gestures:
 - 1) Descriptive
 - 2) Emphatic
 - 3) Symbolic
- c. Eye contact (Goman, 2021) maintaining 3-5 second eye contact with different audience members builds connection.
- d. Stage movement (Duarte, 2012) strategic walking emphasizes message importance.

- e. Vocal Technique for impact;
Pitch variation (Gallo, 2014) lowering pitch for serious, the raising for solutions signals hope.
- f. Strategic pauses (Weissman, 2007) 2-3 second silence before/after key points increases retention by 30%.
- g. Articulation and pace (Humes, 2002) slowing speech during complex data aids comprehension.
- h. Volume control (Groth et al., 2014b) gradual volume increase when describing environmental threats creates urgency.

2. Green Rhetoric

Green rhetoric refers to the strategic use of language, symbols, and narratives to effectively communicate environmental issues and inspire action (Gilbert & Stocklmayer, 2013). This specialized form of environmental combines;

- a. Scientific evidence
- b. Emotional appeals
- c. Values based arguments. to bridge the gap between knowledge and action (Dryzek, 2022)

REFERENCES

- Bradbury, N. A. (2016). Attention span during lectures: 8 seconds, 10 minutes, or more? *Advances in Physiology Education, 40* (4), 509–513.
- Cragan, J. F., Wright, D. W., & Kasch, C. R. (2008). *Communication in small groups: Theory, process, skills* (7th ed). Cengage Learning - Academic and Professional Group.
- Cuddy, A. J. C. (2016). *Presence: Bringing your boldest self to your biggest challenges* (Unabridged). Hachette Audio.
- Dryzek, J. S. (2022). *The politics of the earth* (Fourth edition). Oxford University Press.
- Duarte, N. (2012). *HBR guide to persuasive presentations*. Harvard Business Review Press.
- Gallo, C. (2014). *Talk like TED: The 9 public-speaking secrets of the world's top minds* (1. Aufl). St. Martin's Press.
- Gass, R. H., & Seiter, J. S. (2022). *Persuasion: Social Influence and Compliance Gaining* (7th ed.). Routledge.
- Gilbert, J., & Stockmayer, S. (Eds.). (2013). *Communication and engagement with science and technology: Issues and dilemmas: a reader in science communication*. Routledge, Taylor & Francis Group.
- Goman, C. K. (2021). *Stand out: How to build your leadership presence*. Kogan Page.
- Groth, R. D., Tirko, N. N., & Tsien, R. W. (2014a). CaV1.2 Calcium Channels: Just Cut Out to Be Regulated? *Neuron, 82*(5), 939–940.
- Groth, R. D., Tirko, N. N., & Tsien, R. W. (2014b). CaV1.2 Calcium

- Channels: Just Cut Out to Be Regulated? *Neuron*, 82(5), 939–940.
- Hayhoe, K. (2022). *Saving us: A climate scientist's case for hope and healing in a divided world* (First One Signal Publishers/Atria paperback edition). One Signal Publishers/Atria.
- Heath, C., & Heath, D. (2008). *Made to stick: Why some ideas survive and others die* (2008 Random House hardcover edition). Random House.
- Humes, J. C. (2002). *Speak like Churchill, stand like Lincoln: 21 powerful secrets of history's greatest speakers* (1st ed). Prima Pub.
- McKibben, B. (2019). *Falter: Has the human game begun to play itself out?* Black Inc.
- Mehlenbacher, A. R. (2019). *Science communication online: Engaging experts and publics on the internet*. The Ohio State University Press.
- Mehrabian, A. (1971). *Silent messages*. Wadsworth Pub. Co.
- Moon, J. A. (2004). *Reflection and employability*. LTSN Generic Centre.
- Nisbet, M. C., & Scheufele, D. A. (2009). What's next for science communication? Promising directions and lingering distractions. *American Journal of Botany*, 96 (10), 1767–1778.
- O'Keefe, D. J. (2021). Persuasive Message Pretesting Using Non-Behavioral Outcomes: Differences in Attitudinal and Intention Effects as Diagnostic of Differences in Behavioral Effects. *Journal of Communication*, 71 (4), 623–645.

Smiciklas, M. (2012). *The power of infographics: Using pictures to communicate and connect with your audience*. Que Pub.

Weissman, J. (2007). *Presenting to win: The art of telling your story* (Fully updated ed. in paperback, 9. print). Pearson Education.



SOCIAL MEDIA AND DIGITAL COMMUNICATION FOR ENVIRONMENTAL AWARENESS

By: Pratiwi Sakti, S.S., M.Hum.

Social media is not something privileged nowadays, for the past two decades social media has accompanied Indonesian life starting from the time of our wake up in the morning till the time we go to bed. Many issues arise such as daily life, lifestyle, teens, baby boomers, Gen X, millennial, Gen Z, and Gen Alpha, money, bribery, nepotism, politics, environment and international or national or local doesn't really have borders, borderless. What happens now in the UK or Palestine or Bima or Sumbawa can be seen in real time if you have access to the internet. Almost two, three and five years every household in village or communal communities in Indonesia have access to their own house wi-fi instead of credit data that they install on their phone due to pandemics that cause students to have to access the internet in their own home.

Social media is not merely something that we use in education but also in our business such as e-commerce and transactions such as QRIS and other methods of payment. Social media enables us to do transactions by just using one click and then we just wait for our goods to be sent by the merchant. This digital communication makes our life

efficient and faster than ever before. It eases us in many aspects of life. Social media has a great ability to influence positive environmental trends by giving environmental issues priority within media programs, providing information on the state of the environment, and enabling the public and those interested in environmental affairs, (Rabiah, Vol: 12 - N°: 03 / (September 2024))

In discussing this topic. Let's dig several point, starting from introduction to several issues of environment that usually emerge in social media, such as climate change, pollution, deforestation. Climate Change: Driven primarily by greenhouse gas emissions from burning fossil fuels, deforestation, and industrial activities, climate change leads to rising global temperatures, more frequent extreme weather events, melting ice caps, and sea-level rise. Pollution: Includes air, water, and soil pollution. Air pollution from vehicles and industry affects health and contributes to climate change. Water pollution from chemicals and plastics harms marine life. Soil pollution impacts agriculture and food safety. Deforestation: The large-scale clearing of forests, mainly for agriculture, logging, and infrastructure, leads to loss of biodiversity, disruption of ecosystems, and contributes significantly to carbon emissions.

Social media developed as novelties in network technology into massive communication networks that now touch billions of users globally. (Zhang, March 2025)

Social media has driven the user to the top of awareness that many people are aware of environmental issue, individual will not think that they are alone but rather, they can act together despite the distance, time and chance. They can share easily their activity of "go green" for example and encourage other to follow their path to save the earth.

There are several roles of social media and digital communication in enhancing the awareness of environmental change.

First, rising awareness globally so the actor can act locally, big change is started from act locally. We can post our daily activity that has campaign action concerning small thing such as “pay attention for your litter”, use paper wisely, if you can avoid paper and use email for submitting task why not? Second, empowering youth and small green UMKM and organization that has concern on environment. We can see such as “Jao Mbojo” in east Sumbawa island at Bima has increasing social awareness and engagement to participate in re-planting in several spot. They socialize their activities in social media such as Facebook for millennial and boomer generation, and in twitter and tiktok for gen z and gen alpha. Third, mobilizing communities and starting actions, after we build a community action is no need for once twice yet its need annually per year, per month and per weekend, its help the committee engage young talent. Fourth, Encouraging sustainable lifestyles, it means we start to change our life little by little, starting from pick our litter, using local product, using natural product and decluttering our belonging in wardrobe and our house, we can call it minimalism. We can share tis new lifestyle in our social media platform and let people know our vibes.

Throughout the years we can observe the power of social media to create meaningful discourse around environmental change, raise public awareness, and drive action that will lead us toward a more sustainable environment (Tao Hu, 2020) has shown significant impact that lead policy makers and stake holders

Several social media platforms that usually used by people in campaigning go green life.

1. Facebook

In Indonesia, Facebook has been viral since decades, its user and views increasing buy days, especially baby boomer and millennials still use this platform.

2. Instagram

Instagram is popular for millennials and gen Z. They think that Facebook is outdated and IG is the part of millennials lifestyle, even Gen Z have several accounts to build their outlook, such as first account for their real color, second account for their positive vibes and third for maybe stalking, some says they did it freely. The increasing number of IG users has enable us to understand several terms like hashtag #earth, #nature, #plasticsfree and so on.

3. Twitter/X

Twitter is a very crowded platform and has a lot of updated gossip concerning several things including environmental issues. But in Indonesia twitter users more likely on educated users than least educated people.

4. YouTube and TikTok

Youtube is longer video duration than tiktok, youtube was created in USA while Tiktok was created by China, some music sounds still exist in TikTok while in YouTube some sounds were deleted due to some reasons. The increasing number of users of TikTok is affected by the human brain's tendency to watch short videos for less than one, two or three minutes than the longer video. The TikTok platform has been supporting youth lifestyle especially the earth, go green, and reducing, recycling, and re-use slogans for the years. Many go green lifestyle has increasing in TikTok and YouTube platform, mention minimalism lifestyle is popular YouTube, it talks about the concept, philosophy, and all practical tips that enable users to follow the tips and tricks of go green lifestyle.

5. Influencer, content creator, artist and politician.

In this part we talk about four figures that concern environmental issues, other than that is not our concern. Influencer is a person who has power in this case followers that follow his/her

platform and make good impact bettering our earth as the place that we live in. we can say, Greta Thunberg as a earth activist and humanitarian activist as she said alongside with her three activist/researchers associated with Friday for future quoted by The Guardian titled "We won't stop speaking out about Gaza's suffering – there is no climate justice without human rights."

Content creators focus more on sustainable living, gardening such as @Mohobi gardening at TikTok and climate education and conservation.

From all the platform provided above, hashtag has made content reachable or uncoverable to be found. If the writer post a facebook status and make hashtag, #earth, tis hashtag is readable and ease other users has the similar or same hashtag to be compiled and become one community that reachable. Next, we called it go viral. Virality is one of keys for organizing and promoting environmental issues. Viral hashtag allows users and followers to join and engage in global conversation, making it easier for global movement, mass movement, fund raising and global petition.

These voices build trust and encourage followers to adopt greener lifestyles or support causes and legislation.

In social media as a tool of digital communication to enhance awareness concerning environmental issues there are strategies used by content creators, influencer and earth activist.

1. Storytelling and infographics

Story telling is old fashioned way to engage the audience so they can hear and listen to our aspiration and our story. Truth to be told, nowadays a story telling without evidence is least interesting than if you add some infographics, infographics a scientific fact that shows, data, statistics or articles that show environmental damage that had emerged.

2. Videos and interactive content

Alongside a video always exists interactive content, whether in term of title or hashtag. These two components cannot be separated in any platform. At least interactive content needs our like share and comment. Video is audio visual contents that easily understood by all people without higher degree of education.

3. Fundraising

Fundraising in Indonesia easily found in platform @kitabisa. Fundraising also easily found in trusted account of influencers who willing to participate in giving chance for people to donate.

4. Seminars and exhibition

Seminars are scientific meetings and events that are held by some organization or institution that talk about specific issues. Some English terms used to describe how care world citizen's concerning environmental issues are eco-friendly, go green, plastics free, some stickers in WhatsApp that shows solidarity concerning environmental issues.

Conclusion

All the platforms provided are used to communicate environmental issues, some activities raise human awareness concerning environmental issues. One of popular Swedish activist is Greta Thunberg, she not only the fresh youth environmental issues but also as humanitarian activist, alongside with other activist they believe that "there is no climate justice without human right".

REFERENCE

- Rabiah, L. (Vol: 12 - N°: 03 / (September 2024)). Environmental Issues And New Media: An Examination Of How Social Media Can Be Used To Spread Environmental Awareness And Encourage Ecotourism. *omic Integration*, pp: 49-58.
- Tao Hu, S. W. (2020). Actionable Environmental Science Through Social Media Platforms. *Researchgate publication* , 21-32.
- Zhang, J. (March 2025). The Role of Social Media in Promoting Environmental Sustainability. *Journal of Life Style and Sdg's Reviews* , 1-20.



GLOBAL PERSPECTIVES ON ENVIRONMENTAL ISSUES

By: Wirentake, M.Pd.

Introduction

Environmental issues have risen from the outskirts of popular concern to the fore of international discussion in recent decades. The alarming fact that human activity has drastically changed the Earth's natural systems is highlighted by the growing evidence of ecological degradation, which is shown by rising global temperatures, declining biodiversity, widespread deforestation, and an increase in natural disasters (Steffen et al., 2015). The strain on our planet's limited resources increases as industrialization picks up speed and population growth increases. Environmental problems are now worldwide in scope and influence, impacting all life on Earth and no longer limited to particular nations or areas (UNEP, 2021).

More than simply technical understanding is needed to comprehend environmental challenges on a worldwide scale; political awareness, cultural sensitivity, and most importantly, effective communication is also essential. Language becomes a potent

instrument in environmental communication, not only for informing and educating but also for motivating action and promoting collaboration among various stakeholders, including individuals, corporations, governments, and civil society (Cox & Pezzullo, 2016).

The purpose of this chapter is to examine the complexity of global environmental challenges. The most urgent ecological issues will be discussed, international agreements and solutions will be reviewed, and the vital role that communication plays in promoting environmental awareness and change will be emphasized. We can gain a better understanding of the causes, dynamics, and potential solutions of local environmental issues by placing them in a larger global framework. Most significantly, this global viewpoint can enable people everywhere to understand their mutual need to protect the planet's ecosystems.

9.1. Understanding Global Environmental Issues

Disturbances to the natural environment that negatively impact ecosystems, human health, or both are generally referred to as environmental concerns. These problems result from the interplay between human activity and natural processes. The current rate and scope of environmental degradation are unprecedented and primarily human-caused, even though some changes in the ecosystem happen naturally over vast geological timeframes (Rockström et al., 2009).

Climate change, biodiversity loss, pollution, land degradation and deforestation, water scarcity, ocean acidification, and waste management are some of the most important environmental concerns facing the world today. Sustainable development, as defined by the UN as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs," is directly threatened by each of these problems (Brundtland Commission, 1987). Environmental deterioration is one of the biggest

problems of our day since it threatens human health, social justice, and economic progress.

Examining the underlying causes of global environmental concerns is also necessary for a thorough knowledge of them. These frequently include unsustainable patterns of production and consumption, an excessive reliance on fossil fuels, population growth and urbanization, a lack of environmental rules or their lax implementation, and economic systems that put immediate financial gain ahead of long-term sustainability. Environmental governance has become even more complex as a result of economic globalization. Due to the outsourcing of resource extraction and pollution made possible by international trade, consumption in one nation may cause environmental harm in another (Peters et al., 2011). It is more challenging to track environmental footprints and hold accountable those responsible for them because of this distance.

However, it is not all bleak. Growing global awareness, advancements in environmental science and international cooperation have paved the way for innovative solutions. The rise of renewable energy, sustainable agriculture, circular economies, and green urban planning are examples of positive trends that can counteract environmental degradation if scaled appropriately (OECD, 2020).

9.2. Major Environmental Challenges around the World

The environmental challenges confronting the world today are numerous and interconnected. They vary in severity, scale, and impact across different regions, but together they form a global crisis that threatens ecosystems, human health, and socio-economic stability. In this section, we will explore several of the most pressing global environmental issues, highlighting their causes, consequences, and the geographical areas most affected.

1. Climate Change

Climate change is arguably the most critical environmental issue of our time. It is primarily driven by the accumulation of greenhouse gases (GHGs) in the atmosphere, especially carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O) resulting from human activities such as burning fossil fuels, deforestation, and industrial agriculture (IPCC, 2021). Impacts of climate change include melting glaciers and sea-level rise, more frequent and intense extreme weather events, changes in precipitation patterns, loss of biodiversity, and increased human health risks. Climate change affects all countries but disproportionately harms vulnerable populations in the Global South, who have fewer resources to adapt or mitigate its effects (UNDP, 2022).

2. Biodiversity Loss

Biodiversity, the variety of life on Earth, is declining at an unprecedented rate. The 2019 Global Assessment Report by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) found that around one million species are at risk of extinction, many within decades. This loss is largely driven by habitat destruction, pollution, overfishing, invasive species, and climate change (Daly & Farley, 2011).

The consequences of biodiversity loss include disruption of ecosystems, reducing resilience and ecosystem services such as pollination, water purification, and soil fertility. Next is Loss of genetic diversity, which weakens the ability of species to adapt to environmental changes. The last is cultural and economic impacts, especially on indigenous peoples and communities reliant on natural resources.

3. Deforestation and Land Degradation

Forests are vital carbon sinks and biodiversity reservoirs, yet they are being lost at alarming rates. Between 1990 and 2020, the

world lost over 420 million hectares of forest, mainly in South America and Africa (Bodansky, 2010). Deforestation is driven by agricultural expansion, logging, infrastructure development, and mining.

Land degradation, often linked to deforestation, affects approximately one-third of the Earth's land surface and undermines food security, water availability, and rural livelihoods (UNCCD, 2017). The key effects include soil erosion, desertification, and loss of ecosystem services. Sustainable land management and reforestation initiatives are essential to reverse these trends, yet they require political will, financing, and community engagement.

4. Pollution

Pollution, whether of air, water, or soil, is a major cause of premature death and disease worldwide. According to the World Health Organization, air pollution alone causes an estimated 7 million deaths annually, making it the largest environmental health risk (WHO, 2022). In low- and middle-income countries, outdoor air pollution from vehicles and industry, and indoor air pollution from cooking stoves, are especially severe. Other forms of pollution include water pollution, plastic pollution, and E-waste, a growing problem due to rapid technological turnover, contains toxic materials such as lead and mercury (Balde et al., 2020).

5. Water Scarcity and Management

Water scarcity is intensifying due to population growth, pollution, over-extraction, and climate change. The UN World Water Development Report (WWAP, 2023) estimates that nearly two-thirds of the global population experiences water stress at least one month per year. Impacts of water scarcity include declining agricultural productivity, waterborne diseases, and social conflicts and displacement, as communities and countries compete over limited water resources.

6. Ocean Degradation

Oceans cover more than 70% of the Earth's surface and play a critical role in regulating climate, supporting biodiversity, and providing food and livelihoods for billions of people. However, oceans are increasingly under threat from overfishing that depletes fish stocks and disrupts marine ecosystems, Ocean acidification, caused by CO₂ absorption, which harms coral reefs and shell-forming species and marine pollution, including oil spills, plastics, and chemical runoff. Coral reefs are particularly vulnerable, with climate change and pollution causing mass bleaching events and ecosystem collapse. The loss of healthy oceans not only affects marine life but also undermines food security, especially for coastal communities.

7. Waste Management

The global waste crisis is intensifying, especially with the rise of plastics and electronic waste. According to the United Nations Environment Program (UNEP), the world produces over 300 million tons of plastic waste annually, much of which ends up in oceans and landfills (UNEP, 2018). Meanwhile, global e-waste reached 53.6 million metric tons in 2019, but only 17.4% was formally recycled (Balde et al., 2020). Poor waste management leads to poor health hazards, soil and water contamination, and visual and ecological degradation.

9.3. Global Responses and Policy Frameworks

Environmental problems do not respect national borders. Many of the challenges, such as climate change, ocean pollution, and biodiversity loss are inherently transboundary and require coordinated international action. Over the past decades, various policy frameworks, multilateral agreements, and institutional responses have emerged to tackle these issues. This section examines some of the most influential global environmental governance mechanisms and the roles played by key actors.

1. The Role of the United Nations and Multilateral Institutions

The United Nations (UN) and its various specialized agencies, such as the United Nations Environment Program (UNEP), the Food and Agriculture Organization (FAO), and the World Health Organization (WHO) have played a pivotal role in shaping and coordinating global environmental policies. UNEP, for example, serves as the coordinating body for environmental efforts within the UN system, overseeing environmental monitoring, assessment, and policy development on a global scale (UNEP, 2022). In addition, the UN has established the Sustainable Development Goals (SDGs), which serve as a comprehensive framework for international cooperation on environmental issues.

2. Major International Environmental Agreements

Several legally binding international agreements have been established to address specific environmental issues, each targeting critical aspects of global sustainability. One of the most significant is the Paris Agreement (2015), adopted under the UN Framework Convention on Climate Change (UNFCCC), which commits signatory countries to limit global warming to well below 2°C, preferably 1.5°C, above pre-industrial levels. Countries submit Nationally Determined Contributions (NDCs) to outline their emissions reduction targets, while developed nations pledge financial support to help developing countries with mitigation and adaptation efforts. Another major agreement is the Convention on Biological Diversity (CBD), adopted in 1992, which aims to conserve biodiversity, promote sustainable use, and ensure the fair sharing of genetic resources.

Despite the abundance of international frameworks, the implementation and compliance of environmental agreements face several global challenges. These include a lack of political will, especially when environmental objectives clash with economic interests, as well as insufficient financing for adaptation and

technology transfer in developing countries. To achieve meaningful progress, the global community must strengthen accountability, improve coordination, and commit to long-term political and financial support for environmental governance.

9.4. Strategies for the Future and Public Engagement

As environmental problems become increasingly complex and urgent, finding effective, equitable, and sustainable solutions is more critical than ever. Global responses must evolve beyond high-level negotiations and technological fixes to embrace inclusive strategies that empower communities, foster innovation, and promote behavioral change. This final section outlines key strategies for future progress, with a particular focus on education, communication, and public participation.

1. The Role of Environmental Education

Environmental education plays a crucial role in fostering a more informed, responsible, and engaged global citizenry. By enhancing environmental knowledge, shaping attitudes, and promoting pro-environmental behaviors, education becomes a powerful driver of transformative change. It encompasses various core components, including formal education through the integration of sustainability topics into school and university curricula across disciplines. Informal education also contributes significantly, taking the form of outreach programs, museum exhibits, documentaries, and digital media campaigns that reach broader audiences. Additionally, experiential learning offers hands-on opportunities such as community gardening, clean-up drives, and citizen science projects, allowing individuals to directly engage with environmental action. Supporting these efforts, UNESCO's Education for Sustainable Development (ESD) initiative promotes holistic, interdisciplinary approaches that empower learners

to tackle the interconnected environmental, social, and economic challenges of our time.

2. Communicating Environmental Issues Effectively

Effectively communicating environmental issues to the general public requires clarity, relevance, and emotional resonance, especially in a landscape often challenged by misinformation, scientific jargon, and climate fatigue. To overcome these barriers, several strategies can enhance communication efforts. One key approach is framing messages in a positive light, emphasizing co-benefits such as cleaner air or improved health rather than focusing solely on dire warnings. Trust and the credibility of the messenger is critical; when environmental messages are delivered by trusted figures, such as community leaders, educators, or even celebrities, they are more likely to influence public attitudes and behavior, particularly when the messages align with the audience's values (Moser, 2016).

3. Behavioral Change and Sustainable Lifestyles

While systemic change is crucial for addressing environmental challenges, individual behavior still plays a significant role, particularly in high-consumption societies where daily choices have a substantial environmental impact. Promoting sustainable lifestyles involves encouraging changes in consumption habits, travel behavior, energy use, and diet. According to behavioral science, even small, consistent actions can lead to broader cultural shifts when individuals are supported by policies and environments that reinforce sustainable practices (Shwom & Lorenzen, 2012).

4. Policy Integration and Just Transitions

Addressing environmental issues effectively requires that policies be integrated across various sectors, including energy, transport, health, and urban planning. The concept of a just transition has gained prominence, emphasizing the need to move toward a greener economy in ways that are fair and inclusive. Central to this

approach is protecting vulnerable workers who may be displaced by the decline of fossil fuel industries. Providing retraining programs and social support for affected communities is essential to ensure no one is left behind. Additionally, involving marginalized groups in environmental decision-making processes helps build more inclusive and democratic systems. Justice in environmental policy is not only a moral obligation but also a critical component of long-term political and social sustainability (Heffron & McCauley, 2018).

5. Youth Movements and Grassroots Action

Youth-led movements have emerged as powerful forces in the global fight for environmental justice and climate action. Campaigns such as Fridays for Future, the Sunrise Movement, and Indigenous youth initiatives have injected a sense of urgency and moral clarity into environmental discourse. These movements are characterized by their emphasis on intergenerational justice and the imperative to protect the future for coming generations. Youth and grassroots activists often leverage digital platforms to organize, mobilize, and raise awareness. Their activism is also deeply intersectional, linking environmental issues with broader struggles for racial, economic, and gender justice. Importantly, they push for systemic change, challenging the status quo rather than settling for incremental reforms. These movements underscore the need to democratize environmental governance and recognize the vital agency of young people and civil society actors.

6. Building a Culture of Sustainability

Achieving a truly sustainable future requires more than policies and technology. It necessitates a profound cultural transformation. Building a culture of sustainability involves reshaping societal values around nature, consumption, and the well-being of future generations. One key pathway is cultivating an understanding of ecological interdependence as a foundational principle. Celebrating local knowledge and Indigenous practices that emphasize

environmental stewardship can also inspire more sustainable ways of living. Strengthening community resilience through local food systems, cooperatives, and mutual aid networks creates grassroots support for sustainability. Artistic expression and environmental storytelling serve as powerful tools to evoke emotional responses, spark reflection, and motivate action. While cultural shifts tend to be gradual and non-linear, they are essential for fostering long-lasting environmental change.

Conclusion

Environmental challenges are both local and global, urgent and enduring. From rising sea levels threatening small island states to urban air pollution choking megacities, the spectrum of issues requires coordinated, multifaceted responses. While international agreements and technological innovations are essential, they must be supported by engaged publics, inclusive governance, and cultural transformation. This chapter has highlighted that understanding and addressing environmental issues from a global perspective demands not only awareness and communication but also solidarity, justice, and collective imagination.

REFERENCES

- Bodansky, D. (2010). *The art and craft of international environmental law*. Massachusetts: Harvard University Press.
- Brundtland Commission. (1987). *Our common future*. Great Clarendon Street: Oxford University Press.
- Cox, R., & Pezzullo, P. C. (2016). *Environmental communication and the public sphere* (4th ed.). Los Angeles: Sage Publications.
- Daly, H. E., & Farley, J. (2011). *Ecological economics: Principles and applications* (2nd ed.). Washington: Island Press.
- Heffron, R. J., & McCauley, D. (2018). What is the “Just Transition”? *Geoforum*, 88, 74–77.
- IPCC (Intergovernmental Panel on Climate Change). (2021). *Climate change 2021: The physical science basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press.
- Moser, S. C. (2016). Reflections on climate change communication research and practice in the second decade of the 21st century. *Wiley Interdisciplinary Reviews: Climate Change*, 7 (3), 345–369.
- Peters, G. P., Minx, J. C., Weber, C. L., & Edenhofer, O. (2011). Growth in emission transfers via international trade from 1990 to 2008. *Proceedings of the National Academy of Sciences*, 108 (21), 8903–8908.
- Rockström, J., Steffen, W., Noone, K., Persson, Å., Chapin, F. S., Lambin, E. F., ... & Foley, J. A. (2009). A safe operating space for humanity. *Nature*, 461 (7263), 472–475.
- Shwom, R. L., & Lorenzen, J. A. (2012). Changing household consumption to address climate change: Social scientific insights and challenges. *Wiley Interdisciplinary Reviews: Climate*

Change, 3 (5), 379–395.

- Steffen, W., Richardson, K., Rockström, J., Cornell, S. E., Fetzer, I., Bennett, E. M., & Sörlin, S. (2015). Planetary boundaries: Guiding human development on a changing planet. *Science*, 347 (6223), 1259855.
- UN (United Nations). (2015). *Transforming our world: The 2030 agenda for sustainable development*.
- UNEP. (2018). *Single-use plastics: A roadmap for sustainability*. United Nations Environment Program.
- UNEP. (2021). *Making peace with nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. United Nations Environment Program.
- UNFCCC. (2015). *The Paris Agreement*. <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>
- WHO. (2022). *Air pollution*. World Health Organization.
- WWAP (World Water Assessment Program). (2023). *UN world water development report 2023: Partnerships and cooperation for water*.

ENGAGING COMMUNITIES THROUGH ENVIRONMENTAL DIALOGUE

By: Tomi Arianto, S.S., M.A.

10.1. Understanding Environmental Dialogue: Concepts and Foundations

Environmental dialogue refers to a communicative process in which individuals, communities, policymakers, and other stakeholders engage in discussions about environmental issues to promote mutual understanding and collaborative problem-solving. According to Dryzek (2013), environmental dialogue is essential in deliberative democracies because it enables diverse voices to participate in shaping policies and actions regarding ecological concerns. This process goes beyond mere information dissemination; it emphasizes reciprocal communication and joint decision-making.

The foundation of environmental dialogue lies in participatory communication theories, which prioritize inclusion, openness, and shared responsibility. Cox (2010) explains that environmental communication must be dialogic in nature, facilitating not only the transfer of knowledge but also listening and responding to different worldviews. By doing so, environmental dialogue can help bridge the gap between scientific knowledge and community values, making

environmental messages more meaningful and actionable for local populations.

One of the key principles of environmental dialogue is the recognition of local and indigenous knowledge. According to Escobar (2008), environmental issues are deeply embedded in cultural and social contexts, and therefore, understanding local perspectives is crucial. He adds that sustainable solutions are more likely to emerge when communities are seen not merely as recipients of top-down policies but as active contributors to environmental governance.

Another important aspect of environmental dialogue is its potential to build trust among stakeholders. Reed (2008) explains that when dialogue is conducted in a transparent and respectful manner, it fosters trust, reduces conflict, and enhances cooperation. This is particularly important in environmental decision-making, where stakeholders often hold competing interests. Dialogue provides a platform for finding common ground and negotiating mutually acceptable outcomes.

In practice, effective environmental dialogue involves structured facilitation, inclusive representation, and accessible language. According to Daniels and Walker (2001), facilitators play a critical role in guiding discussions, managing conflicts, and ensuring that all voices are heard. They add that tools such as community workshops, public forums, and participatory mapping can enhance the quality of dialogue by making complex environmental data more understandable and relevant.

Environmental dialogue serves as a vital mechanism for inclusive environmental governance. It allows for the integration of scientific and local knowledge, supports democratic participation, and promotes socially just and ecologically sound outcomes. As environmental challenges become increasingly global and complex,

fostering open and sustained dialogue among stakeholders is not only desirable but necessary for long-term sustainability.

10.2. Community Engagement Strategies for Environmental Awareness

Engaging communities in environmental awareness efforts is essential to promoting sustainable behaviors and collective responsibility. According to McKenzie-Mohr (2011), one of the most effective ways to foster environmental awareness is through community-based social marketing (CBSM), which focuses on identifying barriers to behavior change and applying targeted interventions at the community level. This approach prioritizes personal contact and tailored messaging, which have been shown to produce more meaningful and lasting behavior changes than broad public campaigns.

Education and outreach programs also play a significant role in building environmental awareness within communities. Hungerford and Volk (1990) explain that environmental education should not only provide knowledge but also foster a sense of ownership and empowerment among community members. They add that successful programs often include hands-on experiences, such as community clean-up events, ecological restoration projects, and school-based sustainability initiatives, which help individuals connect emotionally with environmental issues.

Another key strategy involves the use of participatory planning and decision-making. According to Arnstein (1969), genuine participation requires moving beyond token consultation toward empowering citizens with real influence in decision-making processes. This involves creating spaces—such as town hall meetings, citizen panels, and environmental advisory boards—where diverse voices can contribute to environmental planning. Such participation increases the

legitimacy of environmental policies and enhances public trust in institutions.

Leveraging local leadership and social networks is also critical for effective community engagement. Kretzmann and McKnight (1993) explain that asset-based community development (ABCD) focuses on identifying and mobilizing the strengths and capacities already present in the community. According to them, environmental initiatives are more successful when led by local champions who are trusted and respected within their communities, as they can motivate and mobilize participation more effectively.

Digital tools and social media have also become powerful avenues for community engagement in environmental issues. According to Brulle (2010), online platforms enable the rapid sharing of information, mobilization of grassroots action, and formation of environmental advocacy networks. However, he adds that digital engagement should be complemented by offline activities to ensure inclusiveness, especially in communities with limited internet access or digital literacy.

Fostering environmental awareness at the community level requires a multifaceted strategy that combines education, participation, leadership, and technology. By aligning engagement efforts with the unique needs and characteristics of each community, it is possible to cultivate a sense of shared environmental responsibility and inspire long-term behavioral change. These strategies not only strengthen community ties but also contribute significantly to broader sustainability goals.

10.3. Tools and Platforms for Facilitating Environmental Dialogue

In the digital age, environmental dialogue is increasingly supported by a range of tools and platforms that facilitate communication, collaboration, and information sharing among diverse

stakeholders. These tools help overcome geographical, cultural, and institutional barriers, enabling more inclusive and participatory environmental governance. According to Fung, Gilman, and Shkabatur (2013), digital platforms can enhance transparency and accountability while also empowering citizens to actively engage in environmental decision-making processes. Whether through online forums, mapping applications, or real-time data dashboards, these technologies provide accessible spaces for dialogue and action.

Additionally, traditional tools such as community meetings and participatory workshops remain vital in contexts where digital access is limited or where face-to-face interaction builds stronger trust and collaboration. Hybrid approaches that integrate online and offline engagement have also become popular, allowing for broader participation and deeper deliberation. The table below outlines some of the most commonly used tools and platforms for facilitating environmental dialogue, along with their key features and applications.

Table 1. Common Tools and Platforms for Facilitating Environmental Dialogue

Tool/Platform	Description	Key Features	Application Example
Community Workshops	In-person meetings for discussion and planning	Face-to-face dialogue, facilitation, consensus	Land-use planning, conservation initiatives
Online Discussion Forums	Digital spaces for asynchronous communication	Threaded conversations, moderation	Local environmental policy debates

Participatory Mapping (e.g., GIS)	Tools that allow communities to map environmental issues collaboratively	Visual data layers, community input	Deforestation tracking, urban planning
Mobile Apps for Reporting	Apps that enable users to report environmental problems	GPS tagging, photo uploads, notifications	Pollution tracking, illegal dumping alerts
Social Media Campaigns	Use of platforms like Twitter, Facebook, or Instagram for awareness and mobilization	Broad outreach, hashtag use, live interaction	Climate strikes, awareness days
Webinars and Virtual Town Halls	Online live sessions with presentations and public interaction	Q&A, live polls, expert panels	Public consultations, environmental education
Data Dashboards	Platforms that display real-time environmental data	Visualization tools, interactive graphs	Air/water quality monitoring, emissions data

10.4. Case Studies: Successful Community-Based Environmental Initiatives

1. Waste Management through Community Sorting in Indonesia

A village in Central Java implemented a waste sorting program led by local women's groups. Community members were educated about separating organic and inorganic waste, and composting was introduced. This reduced landfill use and created organic fertilizer for local farming.

2. Urban Greening Project in South Africa

In a densely populated township, a community-driven initiative turned vacant lots into green spaces with native plants. This effort improved air quality, provided shade, and reduced urban heat while engaging youth in environmental stewardship.

3. Mangrove Reforestation in the Philippines

A coastal community collaborated with local NGOs to replant mangroves after years of deforestation. The initiative not only restored biodiversity but also strengthened coastal protection against typhoons and floods.

4. Rainwater Harvesting in Rural India

Faced with water scarcity, villagers installed simple rainwater collection systems on rooftops. Community meetings helped spread the method, leading to improved access to clean water and reduced dependence on unreliable groundwater sources.

5. Plastic-Free Market Campaign in Kenya

A grassroots movement launched by market vendors aimed to eliminate single-use plastic bags. Alternatives such as woven baskets were promoted, and signage educated shoppers on the environmental impacts of plastic waste.

6. Community Forest Management in Nepal

Villagers formed committees to manage nearby forest resources sustainably. The system involved setting rules for logging, replanting, and fair use, ensuring forest regeneration and income through the sale of forest products.

7. Solar Lighting for Off-Grid Communities in Bolivia

A cooperative introduced affordable solar lanterns in remote villages lacking electricity. Community members were trained to maintain the equipment, leading to safer households and better study conditions for children.

8. River Clean-Up Campaign in the United States

Residents living near a polluted river organized monthly clean-up events and raised awareness through social media. The initiative led to a significant reduction in litter and increased public support for stricter pollution controls.

These examples demonstrate how community involvement, local knowledge, and collective action can create impactful and sustainable environmental change.

10.5. Building Sustainable Futures Through Inclusive Environmental Communication

1. Sustainable Futures

- a. Implies long-term thinking: environmental, social, and economic sustainability.
- b. Could reference the UN Sustainable Development Goals (SDGs).
- c. Connects environmental stewardship to equity, resilience, and innovation.

2. Inclusive Communication

- a. Acknowledges the need for diversity in voices and experiences.
- b. Recognizes historical marginalization in environmental decision-making.
- c. Suggests participatory, culturally competent, and accessible dialogue.

3. Environmental Communication

- a. Focus on how information is shared, understood, and acted upon.
- b. Includes media, community engagement, education, and policy discourse.
- c. Has potential to change behaviors, shape policy, and build collective action.

4. Possible Outline for an Article or Presentation Introduction

- a. Define sustainability and environmental communication.
- b. Discuss the need for inclusivity in the face of global environmental crises.
- c. State your thesis: inclusive communication is essential to building sustainable futures.

Section 1: The Role of Communication in Sustainability

- a. Historical overview of environmental communication.
- b. Examples of effective environmental campaigns.
- c. Role of media, education, and digital platforms.

Section 2: Barriers to Inclusion

- a. Language, cultural, and socioeconomic barriers.
- b. Digital divides and knowledge hierarchies.
- c. Structural exclusion in policy processes.

Section 3: Strategies for Inclusive Communication

- a. Community-based approaches.
- b. Co-creation of knowledge (e.g., Indigenous and local knowledge systems).
- c. Visual, multilingual, and narrative-based communication tools.

Section 4: Case Studies

- a. Urban planning with community participation.
- b. Environmental justice movements (e.g., Flint, Standing Rock).
- c. Climate change education in marginalized communities.

5. Suggestions for Refinement (Optional)

- a. If you're targeting a specific audience or format, you might tweak the title:
- b. Academic: "Toward Just and Sustainable Futures: The Role of Inclusive Environmental Communication"
- c. Policy Brief: "Inclusive Communication for Sustainable Development: A Framework for Environmental Justice"
- d. Public Outreach: "Everyone's Voice Matters: How Inclusive Communication Builds a Greener Future"

REFERENCES

- Arnstein, S. R. (1969). A ladder of citizen participation. *Journal of the American Institute of Planners*, 35 (4), 216–224.
- Brulle, R. J. (2010). From environmental campaigns to advancing the public dialog: Environmental communication for civic engagement. *Environmental Communication*, 4 (1), 82–98.
- Cox, R. (2010). *Environmental communication and the public sphere* (2nd ed.). Sage Publications.
- Daniels, S. E., & Walker, G. B. (2001). *Working through environmental conflict: The collaborative learning approach*. Praeger.
- Dryzek, J. S. (2013). *The politics of the Earth: Environmental discourses* (3rd ed.). Oxford University Press.
- Escobar, A. (2008). *Territories of difference: Place, movements, life, redes*. Duke University Press.
- Hungerford, H. R., & Volk, T. L. (1990). Changing learner behavior through environmental education. *The Journal of Environmental Education*, 21 (3), 8–21.
- Kretzmann, J. P., & McKnight, J. L. (1993). *Building communities from the inside out: A path toward finding and mobilizing a community's assets*. ACTA Publications.
- McKenzie-Mohr, D. (2011). *Fostering sustainable behavior: An introduction to community-based social marketing* (3rd ed.). New Society Publishers.
- Reed, M. S. (2008). Stakeholder participation for environmental management: A literature review. *Biological Conservation*, 141 (10), 2417–2431.



THE FUTURE OF ENVIRONMENTAL COMMUNICATION: TRENDS AND INNOVATIONS

By: Daniar Sofeny, S.Pd., M.Pd.

11.1. Introduction to Environmental Communication

The multidisciplinary discipline of environmental communication studies how people, groups, the media, and government discuss environmental issues. Study and practice how messages about the environment are constructed, shared, and interpreted across various medias ranging from traditional to digital are also included (Cox, 2013).

There are two main core purposes of environmental communication:

1. Inform the public and raise awareness about environmental problems such as climate change, pollution, biodiversity loss, and deforestation; and
2. Motivate action and influence behaviors, social norms, policies that support environmental sustainability (Aritonang, 2022).

The scope of this is broad and continually evolving. It spans

diverse sectors such as education, journalism, advertising, policymaking, activism, and scientific communication plays a vital role in shaping how societies perceive and respond to ecological challenges (Moser, 2016).

In the digital era, the boundaries of environmental communication have expanded significantly. Social media platforms, blogs, podcasts, interactive websites, and virtual events now serve as powerful tools for spreading environmental messages quickly and globally. As new technologies emerge, the scope also includes the integration of artificial intelligence, data visualization, and immersive storytelling in environmental narratives (Lejano, et al., 2020). Thus, understanding the definition and scope of environmental communication is the first step toward exploring how it can be improved, aligned, and innovated with future global needs.

11.2. Historical Development

Environmental communication, as a formal field of study and practice, emerged in response to growing public concern about ecological issues during the mid to late 20th century. Initially, communication about the environment was rooted in scientific discourse, environmental activism, and policy advocacy, particularly following major events like the publication of *Silent Spring* by Rachel Carson in 1962, which is often credited with igniting the modern environmental movement (Carson, 1962).

In the 1970s and 1980s, environmental communication began to diversify beyond scientific reports and governmental statements. Media coverage started to play a significant role in shaping public perception of ecological crises such as oil spills, deforestation, and climate change (Cox, 2007). The discipline also began incorporating insights from communication studies, sociology, political science, and environmental ethics, giving rise to a more interdisciplinary approach.

By the early 2000s, the focus expanded to include digital communication, public participation, and risk communication. The advent of the internet and social media significantly changed how environmental issues are communicated, allowing grassroots movements to gain visibility and global reach (Hansen, 2011). Scholars began exploring how different platforms influence environmental narratives and shape collective action.

Today, environmental communication encompasses a wide array of practices from scientific journalism and corporate sustainability messaging to indigenous knowledge dissemination and climate advocacy campaigns. It continues to evolve alongside societal, technological, and ecological changes, making it a dynamic and ever-relevant field (Pezzullo & Cox, 2018).

11.3. Challenges in Current Practices

Despite growing awareness and technological advancements, environmental communication still faces numerous challenges that hinder its effectiveness in influencing public behavior and policy-making.

1. Information Overload and Misinformation

In the digital era, the public is bombarded with vast amounts of information daily, including conflicting messages about environmental issues. This overload often leads to confusion and skepticism, especially when misinformation or disinformation is spread by vested interests (Boykoff & Boykoff, 2004). The complexity of scientific data adds another barrier, making it difficult for lay audiences to engage meaningfully with environmental content.

2. Lack of Cultural and Contextual Sensitivity

Many communication strategies adopt a one-size-fits-all approach, ignoring local cultural contexts and indigenous knowledge systems. This can lead to ineffective or even counterproductive

messaging, particularly in diverse societies where environmental meanings and practices vary widely (Kwaymullina, 2016).

3. Greenwashing and Corporate Manipulation

Corporations increasingly use sustainability rhetoric to build a positive public image without implementing real environmental changes a phenomenon known as greenwashing. These practices dilute authentic environmental messages and erode public trust in both private and nonprofit environmental efforts (Delmas & Burbano, 2011).

4. Public Apathy and Climate Fatigue

Long-term exposure to climate warnings can lead to desensitization or fatalism, where individuals feel powerless to act. This emotional exhaustion termed climate fatigue is a growing concern among communicators trying to maintain public engagement (O'Neill & Nicholson-Cole, 2009).

5. Digital Inequality

While digital platforms have expanded the reach of environmental messaging, access remains uneven. Communities in remote or low-income areas often lack the infrastructure or literacy to benefit from digital campaigns, exacerbating existing information gaps (Castells, 2010).

11.4. The Role of Media in Environmental Awareness

Media has long played a central role in shaping public understanding of environmental issues. From traditional print and television to the rise of social media and digital media, the way environmental messages are communicated continues to evolve bringing both new opportunities and challenges.

1. Traditional Media: Foundational but Declining Reach

Television, newspapers, and radio have historically been instrumental in introducing environmental discourse to the public. For

instance, major TV documentaries like Planet Earth or An Inconvenient Truth had a significant influence on global awareness.

Table 1. Comparative Reach of Environmental Content by Media Type (Global Averages, 2023)

Media Type	Average Monthly Reach	Engagement Level	Key Strengths
Television	52%	Medium	Visual Storytelling, credibility
Print Newspapers	29%	Low	In-depth reporting, permanence
Radio	34%	Low	Accessibility in rural areas
Social Media	85%	High	Interactivity, Viral potential
Online News Sites	65%	Medium-High	Speed, Multimedia formats

Source: Global Media Impact Report, UNESCO, 2023

2. Rise of Social Media and Citizen Journalism

Platforms like YouTube, Twitter (X), and Instagram have allowed environmental activists, NGOs, and even ordinary citizens to share real-time information, mobilize movements, and challenge dominant narratives. The global *Fridays for Future* climate strike, led by youth activists, is a strong example of social media’s organizing power (Fisher & Nasrin, 2021).



Figure 1. Flowchart of the impact of social media on environmental awareness

3. Misinformation and Echo Chambers

While media boosts awareness, it also presents the risk of misinformation, especially on unregulated platforms. Studies have shown that climate change denial content can spread faster than verified facts, particularly on platforms with algorithm-driven feeds (Lewandowsky et al., 2017).

4. Media Framing and Emotional Impact

The way media *frames* environmental news whether as disaster, conflict, or hope affects public perception and policy priorities. Research suggests that hopeful or solution-focused messages may increase engagement more effectively than fear-based messages alone (O'Neill & Nicholson-Cole, 2009).

5. Local vs Global Narratives

Media also plays a role in balancing global concerns with local realities. While global warming is a planetary issue, its communication

must be adapted to local contexts, e.g., sea level rise for coastal communities or deforestation for rural villages.

11.5. Environmental Education and Public Engagement

Environmental education (EE) plays a critical role in building awareness, understanding, and a sense of responsibility toward the environment. By teaching people how ecosystems function, how human actions affect the planet, and how to live more sustainably, EE empowers individuals and communities to make informed decisions.

“Environmental education has the power to transform lives and society. It informs, inspires, and influences attitudes. It motivates action.” *North American Association for Environmental Education (NAAEE)*

Studies show that more than 80% of environmental education programs lead to pro-environmental behavior among students, often with long-lasting effects.

Public engagement involves actively involving communities in environmental initiatives—such as clean-up drives, tree planting events, sustainability workshops, and citizen science projects. This approach not only spreads awareness but also transforms people into active contributors to environmental solutions.

“The achievement of EPA’s environmental goals requires the active engagement of all stakeholders and organizations that are impacted by EPA policies and regulations.” *U.S. Environmental Protection Agency (EPA)*

Building strong relationships with the public also ensures that environmental actions are equitable, inclusive, and grounded in local context.

Here’s a table summarizing key findings related to environmental education and public engagement:

Table 2. Suumarizing Key Findings

Indicator	Key Finding	Source
EE Program Effectiveness	Over 80% programs lead to positive environmental behaviors among students	NAAEE
Educational Benefits	EE improves academic performances, engagement, and sense of community	NEEF
Public Participation	Public involvement is essential for meeting national environmental goals	EPA

11.6. Innovation in Environmental Communication

In the digital age, environmental communication has evolved beyond traditional methods, embracing innovative technologies and storytelling techniques to engage diverse audiences and inspire action.

1. Visual Storytelling: Warming Stripes

Developed by climate scientist Ed Hawkins, the Warming Stripes are a series of colored bars representing the change in global temperatures over time. This minimalist design has been widely adopted in media, fashion, and public installations to visually convey the urgency of climate change

2. Conversational AI: OceanChat

OceanChat utilizes AI-powered virtual marine creatures to engage users in conversations about ocean conservation. This

interactive approach has been shown to increase environmental awareness and promote sustainable behaviors among participants.

3. Augmented Reality: Mc Donald's McMission

McMission is an augmented reality application launched by McDonald's to educate users about the company's environmental initiatives. Through interactive mini-games, users learn about topics like renewable energy and recycling in an engaging manner.

11.7. Trends Shaping the Future

As environmental challenges become more complex, the future of environmental communication will be shaped by several transformative trends. These trends reflect technological advancements, shifts in public attitudes, and the growing importance of collaboration across sectors.

1. Digital Transformation

The rise of digital platforms, including social media, apps, and websites, has revolutionized how environmental messages are communicated. These platforms provide real-time updates, interactive content, and the ability to mobilize global audiences quickly.

2. Green Innovation and Sustainability

Sustainability-focused technologies are rapidly evolving, and companies are increasingly adopting green innovation as part of their business models. For example, the use of green hydrogen, electric vehicles, and solar technologies is gaining traction globally.

3. The Rise of Global Collaboration

The need for global collaboration is more urgent than ever. Countries, corporations, and local communities are joining forces to tackle issues like climate change and biodiversity loss.

11.8. Building a Framework for the Future

As environmental challenges evolve, it is crucial to develop a strategic framework that fosters long-term sustainability and effective communication. This framework should be flexible, inclusive, and responsive to the dynamic nature of global environmental issues. These are the key strategies for Building a Framework:

1. Emphasizing Collaboration Across Sectors

A multi-stakeholder approach, where governments, businesses, NGOs, and local communities work together, is essential to effectively address environmental concerns. By sharing knowledge, resources, and best practices, stakeholders can amplify their collective impact

2. Integrating Environmental Education into Core Curricula

Environmental education should be mainstreamed into school curriculums to raise a generation that is both knowledgeable and passionate about sustainability. Incorporating environmental topics across subjects such as science, economics, and social studies ensures that students are prepared to tackle future environmental challenges

3. Leveraging Digital Technology an Innovation

Technological innovation, especially in digital tools such as artificial intelligence (AI), big data, and blockchain, can play a critical role in improving environmental communication. By using technology to monitor ecosystems, predict trends, and visualize data, we can enhance public understanding and encourage more sustainable behavior

Conclusion and Future Directions

As the world faces unprecedented environmental challenges, effective communication plays a crucial role in shaping the future. The evolution of environmental communication from traditional media to digital storytelling, virtual engagements, and AI-driven tools has paved the way for more dynamic and accessible methods of spreading

awareness and encouraging action. Those are for Key Takeaways:

1. Innovation Drives Change

The use of new technologies, such as augmented reality, AI, and interactive digital platforms, is revolutionizing the way environmental issues are communicated. These tools not only engage people but also help visualize complex data in ways that are easily understood.

2. Collaboration is Essential

No single entity can address the world's environmental problems alone. Building partnerships across sectors governments, NGOs, businesses, and communities is vital to achieving long-term sustainability goals.

3. Education in the Foundation

By integrating environmental education into curriculums and public outreach programs, we ensure that future generations are not only aware of environmental issues but are also equipped with the skills to solve them.

As we move forward, several directions can shape the future of environmental communication:

1. **Deepening Engagement:** While technological tools offer vast potential, we must also focus on creating emotional and personal connections with individuals. Stories that resonate on a human level will inspire lasting change.
2. **Increased Global Collaboration:** The complex nature of environmental issues requires a global approach. Strengthening international collaborations, like the Paris Agreement and UN SDGs, will continue to be essential for addressing climate change, loss of biodiversity, and pollution.
3. **Leveraging Big Data:** The continued growth of big data can revolutionize environmental communication by providing real-time insights and personalized recommendations to individuals,

communities, and businesses.

4. Focus on Equity: As we move forward, it will be crucial to ensure that environmental solutions are inclusive and equitable, considering the varying capacities and challenges of different communities around the world.

The future of environmental communication lies not only in disseminating information but in empowering individuals and communities to take meaningful actions. By combining innovation with education, collaboration, and empathy, we can collectively move toward a sustainable future.

REFERENCES

- Aritonang, D. (2022). *Environmental Communication in the Digital Era*. Jakarta: Media Edukasi Press.
- Cox, R. (2013). *Environmental Communication and the Public Sphere*. SAGE Publications.
- Lejano, R., Tavares-Reager, J., & Berkes, F. (2020). *Climate and Narrative: Environmental Knowledge in Everyday Life*. Palgrave Macmillan.
- Moser, S. C. (2016). *Reflections on Climate Change Communication Research and Practice in the Second Decade of the 21st Century*. *Wiley Interdisciplinary Reviews: Climate Change*, 7 (3), 345–369.
- Carson, R. (1962). *Silent Spring*. Houghton Mifflin.
- Cox, R. (2007). *Environmental Communication and the Public Sphere*. Sage Publications.
- Hansen, A. (2011). *Environment, Media and Communication*. Routledge.
- Pezzullo, P. C., & Cox, R. (2018). *Environmental Communication and the Public Sphere* (4th ed.). Sage Publications.
- Boykoff, M. T., & Boykoff, J. M. (2004). Balance as bias: Global warming and the US prestige press. *Global Environmental Change*, 14 (2), 125–136.
- Kwaymullina, A. (2016). Learning to Read the Signs: Law in an Indigenous Reality. *Journal of Australian Studies*, 40(1), 91–101.
- Delmas, M. A., & Burbano, V. C. (2011). The Drivers of Greenwashing. *California Management Review*, 54 (1), 64–87.
- O’Neill, S., & Nicholson-Cole, S. (2009). “Fear Won’t Do It”: Promoting Positive Engagement With Climate Change Through Visual and Iconic Representations. *Science Communication*, 30 (3), 355–379.

- Castells, M. (2010). *The Rise of the Network Society*. Wiley-Blackwell.
- UNESCO. (2023). *Global Media Impact Report*.
- Fisher, D. R., & Nasrin, S. (2021). Climate activism and the youth movement. *Annual Review of Sociology*, 47, 9.1–9.18.
- Lewandowsky, S., Ecker, U. K., & Cook, J. (2017). Beyond Misinformation: Understanding and Coping with the “Post-Truth” Era. *Journal of Applied Research in Memory and Cognition*, 6 (4), 353–369.
- O’Neill, S., & Nicholson-Cole, S. (2009). *Fear Won’t Do It: Promoting Positive Engagement With Climate Change*. *Science Communication*, 30 (3), 355–379.
- North American Association for Environmental Education (NAAEE). (n.d.). *Why Environmental Education?*
- North American Association for Environmental Education (NAAEE). (n.d.). *Environmental Education Works: K–12 Student Benefits*.
- National Environmental Education Foundation (NEEF). (n.d.). *Benefits of Environmental Education*.
- U.S. Environmental Protection Agency (EPA). (n.d.). *About the Office of Public Engagement and Environmental Education (OPEEE)*.
- Hawkins, E. (n.d.). *Warming stripes*. Retrieved May 12, 2025, from <https://showyourstripes.info/>
- Pataranutaporn, P., Doudkin, A., & Maes, P. (2025). *OceanChat: The Effect of Virtual Conversational AI Agents on Sustainable Attitude and Behavior Change*. arXiv.
- Wired. (2013, September 3). *Augmented Reality: McDonald's and Metaio*.

AUTHOR'S PROFILE



Dr. Meisuri, M.A.

**Dosen Program Studi Bahasa Inggris, Fakultas Bahasa dan Seni
Universitas Negeri Medan (UNIMED)**

The author was born in Medan on 23 May 1961. The author is a permanent lecturer at the English Study Program, Faculty of Languages and Arts, Medan State University (UNIMED). She completed her Bachelor's (S1) degree in the English Language Education Department, IKIP Negeri Padang, and Master's degree in the Department of Applied Linguistics, Sheffield University, UK., and continued her Doctoral degree in the General Linguistics Program, North Sumatra University (USU) Medan and from Utah State University (USU) America. The author specializes in the field of linguistics, especially Discourse Analysis, Semantic-Pragmatics, as well as studies related to Classroom Discourse Analysis, Ecolinguistics, Curriculum and Material Designs. Apart from studying linguistics, the author also has an interest in the field of leadership and service learning.

AUTHOR'S PROFILE



Ida Nyoman Tri Darma Putra, S.Pd., M.Pd.
Dosen Ilmu Pendidikan Bahasa Inggris
Universitas Nusa Cendana

Ida Nyoman Tri Darma Putra, S. Pd., M.Pd adalah seorang akademisi yang berkomitmen pada pengembangan ilmu pengetahuan di bidang Pendidikan Bahasa Inggris. Beliau meraih gelar magister dari Universitas Mataram dengan penelitian yang berfokus pada Pendidikan bahasa Inggris, English for specific purpose dan linguistic terapan dalam pengajaran bahasa. Selain aktif mengajar, Ida Nyoman Tri Darma Putra, S. Pd., M.Pd juga terlibat dalam berbagai proyek penelitian dan pengabdian yang didanai oleh Kementerian Pendidikan, Kebudayaan, Riset, dan Teknologi. Beliau telah menjadi pembicara dalam sejumlah konferensi internasional dan nasional dan juga telah menerbitkan sejumlah artikel ilmiah di jurnal nasional maupun internasional yang bereputasi.

AUTHOR'S PROFILE



Dr. Maru Mary Jones Panjaitan S.Pd., M.A.Ed.
Dosen Pendidikan Bahasa Inggris
Perguruan Tinggi Advent Surya Nusantara, Pematangsiantar.

Maru Mary Jones Panjaitan was born in Tomuan Dolok, North Sumatra on December 22, 1968. She is registered as a graduate of IKIP Jakarta, a graduate of AUP (Adventist University of the Philippines) and a graduate of STTSU (Sekolah Tinggi Teologi Sumatera Utara) Medan. The woman who is often called Mary is the daughter of A. Panjaitan (father) and R. Tampubolon (mother). Maru Mary Jones Panjaitan has had teaching experience at various levels of education from Kindergarten to teaching adults. She has started teaching since 1992 in various educational institutions both in Jakarta and North Sumatra. Since 2004 until now, she has been an English lecturer at the Surya Nusantara Adventist University.

AUTHOR'S PROFILE



Dr. Dias Andris Susanto, S.Pd. M.Pd.
Dosen Pendidikan Bahasa Inggris
Universitas PGRI Semarang

Lahir di Demak, 14 Desember 1979. Penulis menyelesaikan studi S1 (IKIP PGRI Semarang-2003); S2 Magister (2008) dan S3 Doktoral (2020) diselesaikan di Universitas Negeri Semarang. Penulis Saat ini mengajar di program studi Sarjana S1 dan Magister S2 Pendidikan Bahasa Inggris di Universitas PGRI Semarang. Penulis memiliki kepakaran di bidang *Discourse Studies/Analysis, English Language Teaching, Dan Socio-Pragmatics*. Penulis sangat aktif dalam kegiatan penelitian dan penulisan buku ajar, buku referensi, buku monolog, dan book chapter. Berikut ini adalah beberapa karya yang sudah diterbitkan olehnya: [*Fluent English with Actions-Based Techniques*](#), [*Pengantar Metodologi Penelitian Kualitatif*](#), [*English Correspondences*](#), [*Extensive Reading*](#), [*Linguistik Terapan Berbasis Digital*](#), [*Wacana Lisan Bahasa Jawa di di Jawa Tengah*](#), [*Fluent Expressions: Building Your English Speaking Skills*](#), [*Wacana Lisan Bahasa Jawa di Yogyakarta*](#), [*Wacana Lisan Bahasa Jawa di Jawa Timur*](#), [*Semantics In English Language Teaching*](#), [*Introduction to Discourse Studies in Language Teaching*](#), [*Speaking 3*](#), [*Wordgames Teaching in Vocabulary for Junior High School Teachers*](#),

*Speaking 2, English Discourse Markers in Sociocultural Perspectives A
Compilation on Dissertation Frameworks, Speaking.*

AUTHOR'S PROFILE



Haslinda Mora, M.Pd.

Dosen Bahasa Inggris

Institut Seni Indonesia Padangpanjang

Haslinda Mora, adalah dosen di Institut Seni Indonesia Padangpanjang. Ia mengajar Bahasa Inggris, Public Speaking, Etika Media Massa, Seminar, Ilmu Komunikasi, dan Intermediate English for Tourism. Selain aktif menulis dan menjadi presenter di konferensi internasional seperti ISELT dan ICAMAC, ia juga terlibat dalam kegiatan sosial dan pengabdian masyarakat di bidang pendidikan dan literasi. Dalam buku ini, ia berkontribusi sebagai penulis salah satu chapter.

Haslinda Mora, M.Pd is a lecturer at the Indonesian Institute of the Arts Padangpanjang. She teaches English, Public Speaking, Mass Media Ethics, Seminars, Communication Studies, and Intermediate English for Tourism. In addition to actively writing and being a presenter at international conferences such as ISELT and ICAMAC, she is also involved in social activities and community service in the fields of education and literacy. In this book, she contributed as a writer for one of the chapters.

AUTHOR'S PROFILE



Dr. Umar, S. Pd., M.Pd.

**Dosen Bahasa dan Kebudayaan Inggris
Universitas Teknologi Sumbawa**

Umar was born in Bima Regency, West Nusa Tenggara. Graduated with Bachelor's Degree (S1) in English Language Education STKIP Hamzanwadi Selong in 2010. He obtained a Master of Education (S2) degree in 2013 in the field of Language education English at Ganesha Singaraja University of Education, Bali. He continued his Doctoral studies (S3) in the Linguistics Study Program at the Faculty of Culture, Udayana University Denpasar, Bali in 2017 and completed the Doctoral Program in 2020. Umar was one of the recipients of the Domestic Postgraduate Education Scholarship for the Doctoral Program in 2017. In 2018 he received Dissertation Grant Funds from the Education Fund Management Institute. Recipient of the 2024 Fundamental Research Grant (Regular Scheme) from the Ministry of Education, Culture, Research, and Technology – Science and Technology Division.

As a lecturer in the English Language and Culture Study Program, Umar also always takes part in seminars, both national and international, such as the 2016 International Conference; "To excel in

Teaching and Learning for Global Competence", The TESOL Indonesia International Conference on English Language Teaching, International Seminar on Austronesian Languages and Literature IX, and International Seminar on Cultures, Arts, Education, and Language 2023 and International Conference on Image Processing and Machine Vision (IPMV 2024). In addition to attending various seminars , he is also active in publishing the results of his research, both in National and International Journals and in books form, such as in; Journal of Language Teaching and Learning, Linguistics and Literature, e-Journal of Linguistics, International Journal of Social Science (IJSS), Journal of Language Teaching and Research, The Asian EFL Journal, Journal of Languages and Language Teaching, Journal of Education, Teaching, and Learning, and Edelweiss Applied Science and Technology.

His research interests are in the fields of; Language Learning and Teaching, Semantics and Pragmatics, Sociolinguistics, Tourism Management, and Education Management. E-mail address: umar@uts.ac.id

AUTHOR'S PROFILE



Ayu Melati Ningsih, S.Pd., M.S., M.Pd.
English Literature Lecturer
Universitas Muslim Nusantara Al-Washliyah

The author was born on December 8, 1989, in Melati II Village, Perbaungan Subdistrict, Serdang Bedagai Regency. Currently serving as a lecturer at Universitas Muslim Nusantara Al-Washliyah (UMNAW) in Medan, the author is affiliated with the Faculty of Literature's English Literature Study Program. Bachelor's Degree (S1) in English Language Education from Universitas Muslim Nusantara Al-Washliyah (2011). First Master's Degree (S2) in English Literature from Universitas Islam Sumatera Utara (2014). Second Master's Degree (S2) in English Language Education from Universitas Muslim Nusantara Al-Washliyah (2024).

AUTHOR'S PROFILE



Pratiwi sakti, S.S., M.Hum.

English Tutor

Sumbawa University of Technology

Pratiwi Sakti is an english tutor at Sumbawa University of Technology, I would say. Because I am too afraid claiming myself as a lecturer so I rather saying myself as a proffesional tutor whom facilitating students. I have been tutoring english since 2010 as a part time teacher then move to Sumbawa since october 2017. Her expertise is on sociolinguistics, dialectology soncerning phonology, now she is trying to sharpen her knowledge in CDA and Forensic Linguistics. She was a proffesional interpreter then since pandemic she is rare practicing it then now just focus on her family and academic life as a tutor or newbie lecturer. You can contact Tiwi at pratiwi.sakti@uts.ac.id

AUTHOR'S PROFILE



Wirentake, M.Pd.

**A Lecturer of English language and Culture Department
Universitas Teknologi Sumbawa**

Wirentake was born on 3 March 1991 in Ganti village, Central Lombok. He is currently a lecturer in English Language and Culture Department of Sumbawa University of Technology. He has started his journey as lecturer since 2015. Wirentake finished his undergraduate program in IKIP Mataram majoring in English Language Teaching in 2013. While for his Master degree, he gained it in the Graduate Program of State University of Malang in 2015, majoring in English Language Teaching. Email Address: wirentake@uts.ac.id.

AUTHOR'S PROFILE



Tomi Arianto, S.S., M.A.
Lecturer of Indonesia language and Literature
Universitas Negeri Medan

The author is a lecturer in Indonesian Literature department, the Faculty of Languages and Arts at the State University of Medan. The author completed his undergraduate education at the Literature Study Program, Padang State University and continued his postgraduate studies at the Literature Study Program, Gadjah Mada University. The author held some subject such as English and American Studies, Research Methods, Introduction to literature, cyber literature, etc. In the field of research, various publications and scientific proceedings have been carried out that raise issues regarding the concept of sociology, postcolonialism/multiculture, ecocriticism and so on. The author can be contacted via email tomy2088.ta@gmail.com

AUTHOR'S PROFILE



Daniar Sofeny, S. Pd., M.Pd.

**Dosen Pendidikan Bahasa Inggris
Universitas Islam Darul 'Ulum Lamongan**

Penulis merupakan Dosen di Prodi Pendidikan Bahasa Inggris, Fakultas Keguruan dan Ilmu Pendidikan, Universitas Islam Darul 'Ulum Lamongan sejak Tahun 2015 hingga sekarang. Beliau menempuh Program Sarjana di Prodi Pendidikan Bahasa Inggris Universitas PGRI Ronggolawe Tuban, kemudian melanjutkan Program Pascasarjana di Prodi Pendidikan Bahasa Inggris Universitas Negeri Semarang. Di Awal karirnya, beliau mengajar di sebuah Sekolah Dasar Negeri di kabupaten Tuban, kemudian meningkat mengajar di sebuah Sekolah Menengah Atas Negeri di Kabupaten Rembang hingga lulus S2. Setelah lulus S2, beliau melanjutkan meniti karir menjadi Dosen di Universitas Islam Darul 'Ulum Lamongan hingga sekarang. Motto hidupnya adalah Spirit and Smile. Beliau mayakini bahwa segala sesuatu sudah digariskan yang terbaik oleh Allah SWT.

ENGLISH FOR THE EARTH

A MASTERY GUIDE TO ENVIRONMENTAL COMMUNICATION

"We won't protect what we don't love, and we can't love what we don't understand."

— David Attenborough, Naturalist and Broadcaster

In an era marked by unprecedented environmental challenges, the ability to communicate effectively about the Earth has never been more vital. *English for the Earth: A Mastery Guide to Environmental Communication* is a comprehensive and engaging guide for learners, educators, and advocates who aim to use the power of the English language to inspire change and amplify environmental awareness. This book equips readers with essential vocabulary, communication strategies, and persuasive techniques that are crucial for engaging diverse audiences from grassroots communities to global institutions. With accessible explanations and real-world applications, it bridges the gap between scientific understanding and public engagement, making environmental discourse both actionable and inclusive. Spanning topics from sustainability language, global advocacy, and eco-writing to the art of public speaking and digital activism, this book offers a dynamic toolkit for anyone passionate about protecting the planet. Through a blend of theory, practice, and reflection, it empowers readers not only to speak *about* the environment but to speak *for* it confidently, clearly, and compellingly. Whether you are a student, environmental professional, or social media campaigner, *English for the Earth* invites you to become a more effective voice in the most important conversation of our time.



Penerbit
Gita Lentera

ISBN 978-634-7237-21-7



9

786347

237217

Office 1: Per. Permata Hijau Regency Blok/F1 Kelurahan Pisang
Kecamatan Pauh, Kota Padang, Sumatera Barat
Office 2: Jl. Waling No. 120 Gejayan, Yogyakarta
Cp. Admin: 085156902329
gitalentera.com



IKAPI
IKATAN PENERBIT INDONESIA