

Project result 2: Professional development training for scientists

Training materials for scientists & science communicators

Sustainability issues

1. General description of the module

Partner institution:	University of Groningen
Target group:	Scientists, Researchers, Early Career Researchers, Faculty members involved in science communication activities, science communicators, and science communication students.
Expertise needed per target group:	The target groups need no prior expertise.
Overview of the module:	This module consists of two activities in a workshop style (2 hours) followed by individual work (2 hours).
Duration:	4 hours
Objectives:	- Knowing what sustainability issues exist in the world today. - How to write an effective communication strategy regarding a sustainability issue.
Assessment:	Peer assessment: the participants will provide feedback on each other's work.

2. Description of the individual activities

Title of activity 1:	What sustainability issues do we have in the world today?
Duration:	1 hour
Core ideas – Content:	There are a lot of sustainability issues in the world today. Not everyone might be familiar with every issue (climate change, natural resource use, waste production, water pollution, deforestation, loss of biodiversity, overfishing, ocean acidification and air pollution).
Objectives:	- Which sustainability issues do we have in the world today? - How are these issues related?

	- Can science communication help mitigate these issues?	
Detailed description of the activity's implementation (<i>word limit 300 words max</i>)	The participants start by brainstorming in small groups about which sustainability issues exist in the world today. The participants compare their answers to other groups. The participants are given an overview of the biggest sustainability issues (climate change, natural resource use, waste production, water pollution, deforestation, loss of biodiversity, overfishing, ocean acidification and air pollution). In small groups, the participants discuss how these issues are related and whether science communication can help mitigate these issues.	
Type of activity (<i>select & comment</i>):	Discussion	Brainstorming in small groups which sustainability issues exist in the world today. The participants compare their answers to other groups.
	Reading	The participants are given an overview of the biggest sustainability issues.
	Discussion	Discuss how these issues are related and whether science communication can help mitigate these issues.
Tools (<i>select & comment</i>):	Printed articles	All articles the participants have to read should be printed.
Links of the activity sheets:	Overview of sustainability issues	
Resources (<i>links to the toolkit & infographics</i>):	Key-reading 1: Public Engagement for Net-Zero: A literature review Key-reading 2: Media and scientific communication: a case of climate change Key-reading 3: Shifting public engagement: How media coverage of climate change conferences affects climate change audience segments	

Title of activity 2:	How to tackle sustainability issues; a communication perspective.
Duration:	1 hour
Core ideas – Content:	Sustainability issues can be tackled by informing the public about them. Why do these problems exist, why are they

	problematic, and how can we solve them? Often this communication begins with a communication strategy. The participants will study a communication strategy and learn what makes a good and effective communication strategy.	
Objectives:	- How can we communicate sustainability issues to the general public? - Do the approaches differ by subject? - What makes a communication strategy effective?	
Detailed description of the activity's implementation (word limit 300 words max)	In small groups, the participants discuss how effective science communication can be used to tackle each sustainability issue (climate change, natural resource use, waste production, water pollution, deforestation, loss of biodiversity, overfishing, ocean acidification and air pollution). Are there significant differences between the best approaches for each issue? The participants read a communication strategy regarding a sustainability issue. In small groups, they discuss what aspects make a communication strategy effective.	
Type of activity (select & comment):	Discussion	Discuss how effective science communication can be used to tackle each sustainability issue. Are there significant differences between the best approaches for each issue?
	Reading	Read a communication strategy regarding a sustainability issue.
	Discussion	Discuss what aspects make a communication strategy effective.
Tools (select & comment):	Printed articles	All articles the participants have to read should be printed.
Links of the activity sheets:	Module2.2. Communication strategy.pdf	
Resources (links to the toolkit & infographics):	Key-reading 7: Communicating Climate Change: Why Frames Matter for Public Engagement Key-reading 8: Bridging the gap between science communication practice and theory: Reflecting on a decade of practitioner experience using polar outreach case studies to develop a new framework for public engagement design Key-reading 14: Communication Practices and Political Engagement with Climate Change: A Research Agenda	

Title of activity 3:	Designing a communication strategy
Duration:	2 hours

Core ideas – Content:	Scientific communicators should be able to write a communication strategy, aimed at communicating a sustainability issue to a non-scientific audience based on the information learned during the first two activities.	
Objectives:	- How to write a communication strategy.	
Detailed description of the activity's implementation (word limit 300 words max)	Each participant chooses a sustainability issue. First, they will conduct (online) research into this issue. What are the biggest problems? Are there potential solutions? In particular, the participant will research how science communication regarding this issue could help solve the problem. The participant will design a communication strategy based on this research regarding their chosen sustainability issue. Finally, the participants will pair up in groups of two. They will read each other's communication strategies and provide feedback.	
Type of activity (select & comment):	Research	Conduct (online) research into a sustainability issue. What are the biggest problems? Are there potential solutions?
	Writing	Design a communication strategy regarding a chosen sustainability issue.
Tools (select & comment):	Printed articles	All articles the participants have to read should be printed.
	Computer	Each participant needs a private device.
Links of the activity sheets:	–	
Resources (links to the toolkit & infographics):	Key-reading 13: Public engagement with climate change: the role of human values Key-reading 10: Public engagement with climate change: what do we know, and where do we go from here? Key-reading 15: Quantifying stakeholder learning in climate change adaptation across multiple relational and participatory networks	