Layman's Report
DECIPHER

Holistic decision-making for climate & environment

DECIPHER – Holistic Decision-Making for Climate & Environment
Horizon Europe | Grant Agreement No. 101056898
Coordinator: E3-Modelling
Website: www.decipher-horizon.eu
2022–2025

DECIPHER

Holistic decision-making for climate & environment

Why DECIPHER?

We are living through twin crises: climate change and biodiversity loss, that are deeply connected. Despite numerous national and EU-level initiatives such as the European Green Deal and the Fit for 55 Package, current decision-making approaches often fall short of considering the complexity of environmental, social, and economic systems. Governments and societies need better ways to understand the full impact of their policies, not just in economic terms, but also in terms of well-being, nature, and fairness.

The DECIPHER project emerged to address this gap by providing a holistic, future-proof, and stakeholder-inclusive framework for policy design. Its goal was to improve how governments and institutions design and evaluate climate and environmental policies—ensuring they are effective, fair, and aligned with planetary boundaries.
In other words: DECIPHER helps answer a crucial question: "How can we make environmental and climate policies that are truly fair, effective, and future-proof?"

What did DECIPHER do?

DECIPHER set out to revolutionize environmental policy evaluation by developing an integrated decision-making framework that accounts for system complexity, uncertainty, and stakeholder diversity. The project brought together leading research institutions, universities, think tanks, and modelling experts from across Europe. The project had four specific objectives:

- To build an inclusive, multi-dimensional policy assessment framework;
- To improve existing economic models and integrate them with environmental tipping points and climate damage modelling;
- To co-create solutions with stakeholders through participatory tools;
- To assess major EU policies including the Green Deal and biodiversity strategies.

Key environmental benefits include better resilience planning and safeguarding biodiversity. Socio-economic benefits include fairer policy design and greater public trust.

DECIPHER

Holistic decision-making for climate & environment

Main Achievements

1. A **New Holistic Framework:** An integrated toolbox combining social, economic, and environmental dimensions.
2. **Open-Source Stakeholder Tool:** A free online tool that helps users explore policy outcomes collaboratively.
3. **Policy-Relevant Research:** Peer reviewed studies on climate fairness, participation, and socio-demographic biases.
4. **Dialogue & Awareness:** Webinars, workshops, and labs co-created with EU actors and local stakeholders.
5. **Collaboration with NGFS** (Network of Central Banks and Supervisors for Greening the Financial System), using GEM-E3, CLIMACRED, and EIRIN models to assess short-term scenarios;
6. **Active participation in international forums** such as ECEMP and EAERE;
7. **Preparation of final policy scenario analyses** for dissemination in 2025.

Who Benefits?

- Policymakers needing better tools
- Citizens seeking inclusive decisions
- Researchers working on complex systems
- The environment through systemic policies

European Added Value

DECIPHER contributes to the European Green Deal and Fit for 55 by providing scientifically robust, transparent, and inclusive decision-making tools. Its European added value lies in:

- Strengthening EU leadership in climate and biodiversity policy globally;
- Embedding open science, transparency, and participation into policymaking;
- Creating interdisciplinary methods that bridge economics, environment, and social sciences;
- Supporting capacity-building across Member States, reducing disparities in modelling and assessment capabilities.

By integrating biodiversity, socio-economic fairness, and systemic risks into assessments, DECIPHER ensures that EU policies are not only technically sound but also socially legitimate and future-proof.

DECIPHER

Holistic decision-making for climate & environment

Guidance for Improved Policy Design and Evaluation

One of DECIPHER's key contributions has been to develop practical guidance for improving how policies are designed and assessed. Key lessons include:

- Stakeholder engagement matters: Clear objectives, the right mix of participants, and well-designed workshops increase value.
- Results drive engagement: Sharing clear findings encourages useful input.
- Models and evidence go hand in hand: Combining modelling with case studies builds trust.
- Granularity is important: Local problems need local data.
- Nature-based solutions need stronger financial cases.
- Risk and opportunity frameworks help design resilient decisions.

What Happens Next?

The results are available for use in national and EU policymaking, future research, and education. DECIPHER supports more just, inclusive and resilient environmental strategies.

What DECIPHER recommends?

Promote model usability for non-experts.

Encourage policy-maker co-leadership in modelling projects.

Support education and training so that future decision-makers can use these tools effectively.

DECIPHER

Holistic decision-making for climate & environment

Discover DECIPHER

If you're curious about how policy choices shape our future for climate, for nature and for society, you've come to the right place. DECIPHER isn't just another research project: it's a movement to make decision-making more real, more responsible, more inclusive.

- Dive into our Decision-Making Framework, where economic and biophysical models meet real people, real risks (like tipping points), and real uncertainties.
- Explore how we assess policies like the EU Green Deal, Fit for 55, and nature restoration not in theory, but as they are being lived.
- Join us in with news, webinars, and summer schools that bring together modelers, policymakers, stakeholders, and curious minds.
- See how, by embedding stakeholder voices, valuing societal fairness, and using state-of the-art methods, we can design policies that are not only effective, but also resilient and inspiring.

Visit the website, browse our Results section, try out the Stakeholder Engagement Tool, and be part of the conversation.

Acknowledgement

DECIPHER has received funding from the European Union's Horizon Europe research and innovation programme under grant agreement No. 101056898.