


WHAT Climate WORKS Solutions

Accelerating climate solutions

A global initiative to strengthen
evidence-based climate policy



FUTURE
EVIDENCE
FOUNDATION



We urgently need to convert climate policy innovation into effective climate action at scale. A global What Works Climate Solutions evidence bank would provide timely, comprehensive, and actionable evidence, enabling policymakers, researchers, innovators, and the communities they serve to identify and take the actions that can achieve meaningful progress towards climate goals.

Context



Despite acceleration in climate policy action—hundreds of climate policies are being enacted across the globe, yielding important insights for climate policy design and implementation— global greenhouse gas emissions continue to rise¹ and the vast majority of climate policies have not led to substantial emission reductions.² Ineffective policies and programs are being implemented and replicated, in part because we lack effective systems to identify, assess, and institutionalize evidence of what works in climate policy.

- ¹ [Crippa et al., 2024; Friedlingstein et al., 2024; Forster et al., 2024](#)
- ² [Stechemesser et al., 2024](#)

With very little time and limited resources, it is critical that policy innovation translates into effective, efficient and fair actions at scale.

We aim to develop a robust ‘living’ evidence bank of climate policies that will enable evidence users to understand what policies work, under what conditions, why, and for whom, including their effects on inequality, labour markets, human health and innovation.³ We will design and build this asset as a ‘shared capability’, creating a collaborative process between researchers and decision-makers, enhancing the conditions for emerging knowledge to be rapidly incorporated into policy and practice.

- ³ [The Economist, 2024](#)

What Works Climate Solutions is an independent, community-driven initiative that promotes rigorous evidence on what climate solutions work for evidence-based climate policy.

Challenge



The pace of climate research and policy experimentation is accelerating, but these efforts often happen in isolation without the resources, platforms, and channels to evaluate impact and incorporate findings in an evolving body of knowledge about what works in climate policy. Without these evidence systems, knowledge production is overwhelming policymakers and leading to confusion, poor decision making, misaligned action, and eroded trust in science.

This system failure creates two overlapping challenges: (1) Policy innovation and evaluation is inefficient, and prone to duplication, redundancy, and gaps; and (2) Policymakers struggle to identify, engage with, and apply relevant evidence in line with the most up-to-date science and recommendations. In other words, governments struggle to learn from existing work, miss opportunities for impact and waste resources.

Other parts of the climate policy ecosystem have benefited from collaborative platforms for rigorous, evidence-based synthesis. For nearly forty years, the Intergovernmental Panel on Climate Change (IPCC) has been instrumental in transforming our understanding of climate change and its impacts, providing the main source of scientific evidence underpinning international climate goals such as the 2°C warming limit. These goals are supported by rigorous synthesis practices via model inter-comparison exercises (MIPs)⁴ that have facilitated rapid learning on the mechanics and expected impacts of climate change as well as possible mitigation pathways.⁵

⁴ such as [CMIP](#), [ISIMIP](#), [AgMIP](#) or [ScenarioMIP](#)

⁵ [IPCC, 2023](#)

In contrast to the systems and collaborations underpinning MIPs, there is no analogous process for rigorously assessing ‘what works’ in climate policy that the IPCC and others can draw on.

Synthesis of modeling evidence

What are alternative climate futures and how do human responses and solutions shape them?

Model intercomparisons of climate forcing, impacts, mitigation and adaptation pathways

Synthesis of empirical evidence

What climate solutions have worked, under what conditions, for whom, and why?

Systematic reviews and evidence synthesis on climate solutions

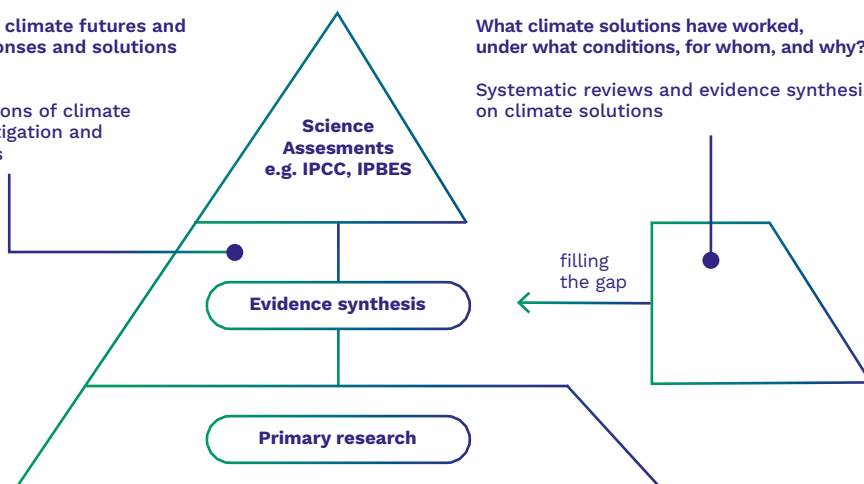


Figure 1
Fixing the evidence pyramid to accelerate learning on what climate solutions work, under what conditions, and why. Rigorous systematic review practices need to complement model inter-comparisons to fill the current void in the evidence pyramid and provide critical support to inform the next IPCC assessment, the Global Stocktake and national policy implementations.

Solution



A What Works Climate Solutions evidence bank would create comprehensive living evidence syntheses designed to support policymakers and their efforts to maximize impact with available resources.

Living evidence was developed to make bodies of knowledge useful for decision-makers by synthesizing and systematizing rapidly evolving and often chaotic bodies of research evidence into timely, policy-relevant, and context-specific guidance. These systems use tech-enabled continuous surveillance methods that monitor emerging research against collaboratively developed frameworks to ensure bodies of scientific knowledge remain up to date. Collaboration between researchers, policymakers, and practitioners create the frameworks for synthesis and continuous monitoring, which drives transparency and engagement across the evidence ecosystem. Implementation of living evidence processes have reduced translation time from evidence to policy, increased engagement with users, and saved resources when compared to conventional synthesis.

The design principles that guide the creation of living evidence systems are themselves evidence-based, reflecting the growing empirical evidence base on research use, which emphasizes the critical importance of cultivating trusted relationships, facilitating frequent engagement and collaboration between research producers and users, and the critical role of timely and high-quality evidence tools and products.

A What Works Climate Solutions evidence bank⁶ would augment existing research and synthesis efforts in the climate ecosystem, fill a critical gap in the evidence pyramid (see Figure 1), and accelerate learning on what climate solutions work, under what conditions, and why. Rigorous systematic review practices will complement on-going synthesis activities from model intercomparisons to address the current void in the evidence pyramid and provide critical support to inform the next IPCC assessment, the Global Stocktake and national policy implementations.

⁶ [Pearson 2024b](#)

Strong demand for these evidence systems coupled with rapid development of the technology⁷ and global infrastructure that supports living evidence has created enabling conditions for rapid growth and impact.⁸ With the support of the Wellcome Trust, IDRC

⁷ [Pearson 2024b](#)

⁸ [Wellcome Trust, 2024](#)

and the German Ministry for Education and Research, we organised the first What Works Climate Solutions Summit in June 2024, attracting over 300 participants from 50 countries, including evidence synthesis practitioners, IPCC authors, as well as policy-makers, evidence curators and funders. The Summit was the launchpad for a What Works Climate Solutions movement and culminated in a call to action build a climate policy ‘what works’ system⁹ and momentum has continued to grow since with many organisations joining a new What Works Climate Solutions Network for policy practitioners and funders.

9 [WWCS, 2024](#)

Acting with urgency will ensure the initial evidence in the bank is available for potential use in the IPCC's seventh assessment period (AR7) and support evidence users in government and civil society to identify and implement the most impactful climate solutions for their context.

WWCS Summit 2024

Learn more: www.whatworksclimate.solutions/wwcs-2024/



335
participants
from **50**
countries



Figure 2
A new movement for change and a call to action - The What Works Climate Solutions Summit convened key stakeholders dedicated to advancing evidence synthesis and the "what works" agenda in climate action. Notable participants included IPCC Chair Jim Skea, German State Secretary and Climate Envoy Jennifer Morgan, Lancet Countdown Executive Director Marina Romanello, and Wellcome Trust's Director of Climate and Health, Alan Dangour.



232
events total
across **44**
parallel
sessions

210
presentations
10
panel discussions
11
keynotes



Proposal



We propose establishing a living evidence bank with up to 45 syntheses of what works evidence, organized by broad topic areas, each with a cluster of 5-6 interconnected, living systematic reviews. A cluster could evaluate the effectiveness of different policy instruments (e.g. carbon pricing, regulatory instruments, behavioural interventions etc.) or the impact of a single policy instrument like carbon taxation across multiple policy outcomes (e.g. effectiveness, efficiency, human health, distribution, labour markets, innovation activity etc.) or economic sectors (energy, industry buildings, transport, agriculture and land-use etc.).

Building a living evidence bank for understanding what works in climate policy to strengthen IPCC AR7 and evidence-based climate policy.

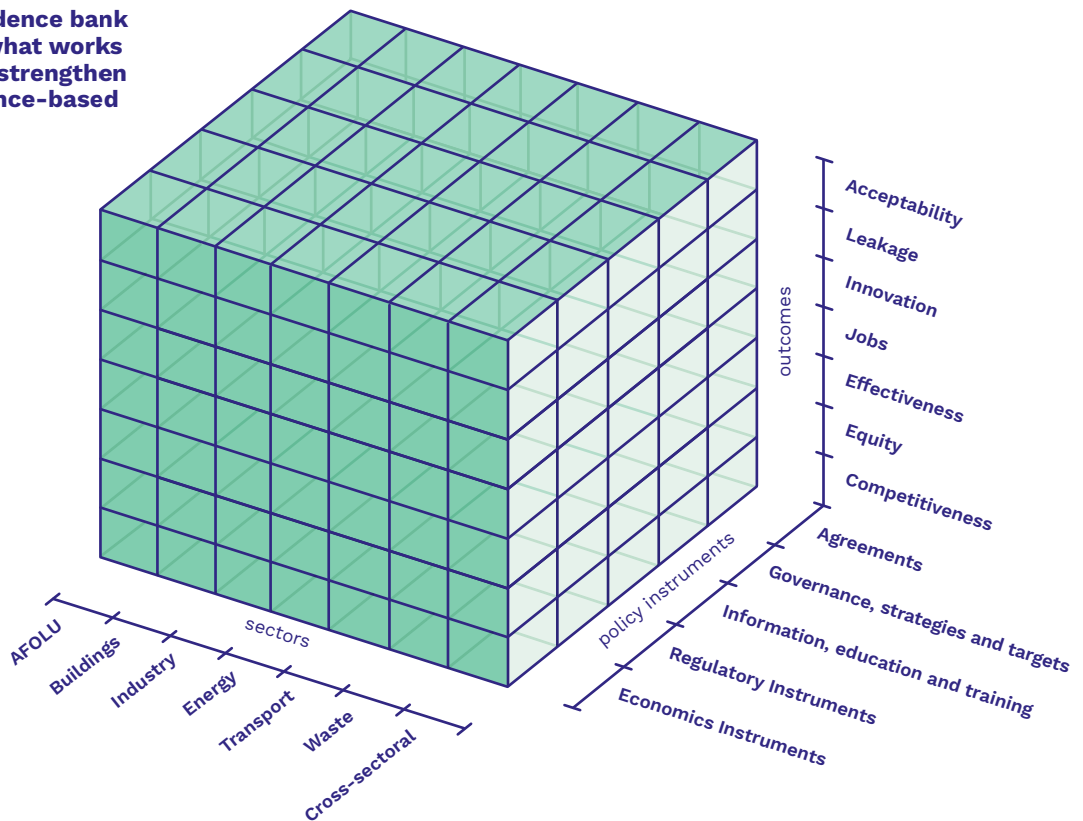


Figure 3
A living evidence base on what works in climate policy. Individual high-quality reviews contribute blocks of evidence to the bank synthesizing outcomes of policy instruments in sectors.

This work will be developed and implemented through global evidence partnerships with domain, synthesis and user engagement expertise and be available as a free, open and living resource that can support the IPCC and national and sub-national policy-makers.

We must move quickly to meet established deadlines and contribute to the seventh assessment cycle of the IPCC. The next Global Stocktake in the international climate negotiations will be completed in 2028. To ensure this evidence bank is available to researchers and policy-makers working on climate solutions during this critical period, we need to complete all clusters of living systematic reviews before the end of 2027.¹⁰ To meet this hard deadline, we need to complete all clusters of living systematic reviews as part of a larger what works evidence bank before the end of 2027.

¹⁰ UNFCCC, 2024, SWP, 2019

We are looking for funders to support one or several clusters of what works evidence, with each organised as a two-year systematic review project (delivered for \$1m, see table below). With project management, communication and user engagement, the overall project will be delivered with up to \$10m, depending on the final number of evidence clusters.

Work Program	Costs
7-9 clusters of 5-6 interconnected, living systematic reviews	\$ 1 million per cluster
Project management, communication and user engagement	\$ 1 million
Total	\$ 8-10 million

Table 1
Funding requirements for a two-year project that supports the upcoming IPCC assessment and the Global Stocktake with up to 45 living systematic reviews on what works in climate policy

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