



Net0 Pathways through improved IAMs across Sectors, dimensions, and scales

## **Deliverable 6.3**

*Public release of the database  
of updated and expanded SSPs*

**Deliverable 6.3**

**30 June 2026**



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## Introduction

The Shared Socio-Economic Pathways (SSPs) are the cornerstone tool of the global scenario community, underpinning the latest climate projections from the climate science community and informing impact assessments and resilience strategies worldwide. However, the existing SSPs have been criticised for not adequately capturing recent technological and social developments, and for reflecting a conventional economic outlook that does not account for more diverse futures. Task 6.3 of PRISMA directly addresses these limitations by developing the next generation of SSPs - revised to incorporate disruptive innovation (including digitalisation and the long-term legacy of COVID-19), narratives consistent with low material and energy consumption, and post-growth storylines with a strong emphasis on wellbeing and inequality.

This deliverable presents the public release of the resulting database of updated and expanded SSPs. The IAMs involved in PRISMA have translated the revised socio-economic narratives into updated emission, energy, and economy scenarios. In line with PRISMA's commitment to open science and FAIR data principles, the full database is made publicly available to support the broader research community in their climate modelling, impact assessment, and policy analysis work.



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## Data Availability

The database of updated and expanded SSPs described in this deliverable is openly accessible via Zenodo at <https://zenodo.org/records/19825038>

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Dataset Restricted

### ScenarioMIP-CMIP7 IAM quantification: Harmonized and Infilled Emissions and Climate Outcomes for Marker Scenarios

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This is a pre-release of the harmonized ScenarioMIP emissions data. Please refer to the [Rules for data use and data sharing of the IAM ScenarioMIP Data](https://scenariomip.apps.ece.iiasa.ac.at) at <https://scenariomip.apps.ece.iiasa.ac.at>.

### Harmonized Emissions of the IAM ScenarioMIP projections for CMIP7

ScenarioMIP-CMIP7 consists of alternative plausible futures including quantified emissions and land use projections.

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SCENARIOMIP IAM QUANTIFICATION FOR CMIP7

## ScenarioMIP Scenario Explorer

This explorer presents the quantifications of ScenarioMIP pathways developed by several Integrated Assessment Models (IAMs) for the Coupled Model Intercomparison Project (CMIP7).


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## The ScenarioMIP-CMIP7 Harmonized Emissions: Pre-release Data

ScenarioMIP provides seven alternative future emissions pathways (from Very Low to High) developed by different IAM teams, for use in CMIP7 climate model experiments. The pathways span a wide range of plausible futures, from very stringent mitigation to high-emissions trajectories, and are designed to facilitate integrated research across climate science, integrated assessment modeling (IAM), and impact communities. The data is harmonized to CMIP7 historical emissions and feeds into the MAGICC climate emulator, ensuring consistency with Earth System Model forcings available through the Earth System Grid Federation.

Seven IAM teams participated in the scenario development process, each producing a marker scenario.

## PRISMA contribution

The EU-funded PRISMA project contributed directly to the scientific foundations of ScenarioMIP. PRISMA's Task 6.3 (led by CMCC) developed a next-generation set of emissions scenarios by revising the Shared Socio-Economic Pathways (SSPs), the primary scenario framework used by climate science and impact communities in recent assessment cycles. The original SSPs had been criticised for not capturing recent technological and social developments, and for reflecting a conventional economic outlook. PRISMA addressed these gaps by incorporating disruptive innovation (including digitalization and post-COVID dynamics), low material and



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energy consumption narratives, and post-growth storylines with an emphasis on wellbeing and inequality. The IAMs involved in PRISMA, including WITCH, translated these revised SSPs into updated emissions, energy, and economy scenarios, which were publicly documented and released to support the broader community. This work fed directly into the ScenarioMIP scenario development process, making PRISMA an upstream contributor to the CMIP7 scenario infrastructure.

## Current data status

This pre-release includes only the harmonized emissions of the marker scenarios. Additional non-marker quantifications and further data variables will be published in subsequent releases.

## Access restrictions (until 31 August 2026)

- Registration required via ScenarioMIP Explorer or Zenodo
- Scientific use only (no social media or press dissemination)
- No third-party sharing
- Paper submissions must wait until after 1 September 2026, when IAM documentation preprints become available
- IPCC use is permitted, using the database as a preliminary citation, with citations to be updated in Spring 2026

After 1 September 2026, all restrictions are lifted and standard scientific citation practices apply.



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