SHAPE

Sustainable development pathways achieving Human well-being while safeguarding the climate And Planet Earth

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Overview of the project

AXIS JPI Climate

SHAPE: Objectives

- Investigate interactions between mitigation of climate change and the broader agenda of the Sustainable Development Goals (SDGs)
- Develop and analyse Sustainable Development Pathways that
  - achieve the SDGs in 2030
  - maintain sustainable development afterwards
  - reach the climate goals of the Paris agreement

Consortium partners

SHAPE

Potsdam Institute for Climate Impact Research
P I K

PIK (Germany): project lead, integrated assessment modelling, water-energy-land nexus, sustainable development pathways

International Institute for Applied Systems Analysis
I I A S A www.iiasa.ac.at

IIASA (Austria): integrated assessment modelling, decent living standards

IASS POTSDAM
Institute for Advanced Sustainability Studies

IASS (Germany): stakeholder dialogue, co-design of scenarios

Stockholm Resilience Centre
Sustainability Science for Biosphere Stewardship

SRC (Sweden): stakeholder dialogue, governance of trans-formations

Universiteit Utrecht

UU (Netherlands): integrated assessment modelling, water-energy-land nexus

NTNU
Norwegian University of Science and Technology

NTNU (Norway): industrial ecology, resource footprints

d·i·e
Deutsches Institut für Entwicklungspolitik

German Development Institute

DIE (Germany): governance of transformations, political economy

Project Structure

SHAPE

WP1 (IASS/SRC): Stock-take & stakeholder interaction

WP4 (IIASA): Climate and inequality

WP2 (PBL): Climate and the Water-Energy-Land Nexus

WP5 (DIE/SRC): Governing the transformation

WP3 (IIASA): Sustainable production and consumption

WP6 (PIK): Sustainable Development Pathways for achieving climate and other sustainability goals

SDG Coverage

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WP2 (PBL): Climate and the Water-Energy-Land Nexus

WP3 (IIASA): Sustainable production and consumption

WP4 (IIASA): Climate and inequality

WP5 (DIE/SRC): Governing the transformation

WP6 (PIK): Sustainable Development Pathways for achieving climate and other sustainability goals

Above SDGs + Scenario design and input assumptions for:

Narrative cross-cutting activity

SHAPE

Goal: Develop a set of new SDP narratives highlighting branching points that give rise to a multiplicity of ways to a sustainable futures. Those narratives would form the basis for the development of quantitative SDPs.

Step 1: Identify narrative domains and develop sub-narratives and branching points for these domains: Societal governance, International Architecture, Future of Work, Energy, Land, Water, Consumption & Production, Urban/Rural life, Mobility

Step 2: Organize sub-narratives into a set of overarching narratives

Step 3: Run extensive stakeholder and expert consultations on draft narratives

Step 4: Revise and finalize until end 2020

Scientific Advisory Board

- Dirk Messner (German Federal Agency of the Environment)
- Jale Tosun (U Heidelberg)
- Vaibhav Chaturvedi (CEEW)
- Zoi Vrontisi (E3Mlab)

Target audience and users

- UN Sustainable Development Solutions Networks (SDSN)
- UN High-level political forum on Sustainable Development
- Local/regional SDG initiatives & policymakers
- IPCC AR6 & AR7
- UNFCCC global stocktake
- …

Research connections

The World in 2050:

- research initiative to support the implementation of the SDGs until 2030 and beyond (most SHAPE partners involved)

Horizon 2020 projects:

- NAVIGATE: next-generation integrated assessment models (coordinated by PIK)
- ENGAGE: informing global and national climate action (coordinated by IIASA)

JPI axis projects:

- CHIPS: distributional impacts and inequality (coordinated by PIK)