



Low-carbon society: An enhanced modelling tool for the transition to sustainability

Simulating the best path to sustainability

The road humanity is treading poses serious threats to our collective future. Global warming has reached such alarming levels that it has been declared a climate emergency. From the largest mammals to the smallest insects, species are dying out at an unprecedented rate, with the resulting biodiversity loss threatening ecosystems around the world with collapse. With humanity's insatiable appetite for material goods, the world's forests are vanishing at a troubling rate and are finite resources, from fossil fuels to minerals, are being overexploited.

We now stand at a crossroads. Citizens in Europe and around the world are deeply concerned about the state of the environment and are demanding urgent change. Policymakers are seeking sustainable alternatives for a low-carbon, net zero-emissions future. Civil society stands in-between, campaigning for the concerns of citizens and help shape the policy debate.

Model paths forward

Over and above the anxiety created by all these negative developments, there is much uncertainty in the air about which direction is best to shape a better future. With the spectrum of available alternatives ahead, ranging from business as usual to radical system change, it is important to acquire an accurate picture of what the future environmental, social and economic ramifications are of the different options.

With support from the European Union's Horizon 2020 research programme, LOCOMOTION is creating powerful

Accurate scenarios for informed decision-making

"LOCOMOTION aims to enhance the existing MEDEAS Integrated Assessment Models to provide policy-makers and relevant other stakeholders with an open source, well-documented model to assess the feasibility, effectiveness, costs and impacts of different sustainability policy options."

1.

2.

3.



Start: 1st June 2019

End: 31th May 2023

Duration: 4 years

Number of partners: 13

Lead partner:

University of Valladolid

Funding: Horizon 2020 programme, grant agreement no: 821105

@ www.locomotion-h2020.eu

✉ info@locomotion-h2020.eu

Follow us:



tools to help determine the consequences of both inaction and action.

The four-year project is developing sophisticated models to assess the implications and impact of different policy options in order to help society – policymakers, civil society, academia and other stakeholders – make informed decisions about the various transition paths to a sustainable, low-carbon future, not to mention the consequences of inaction of the wrong actions.

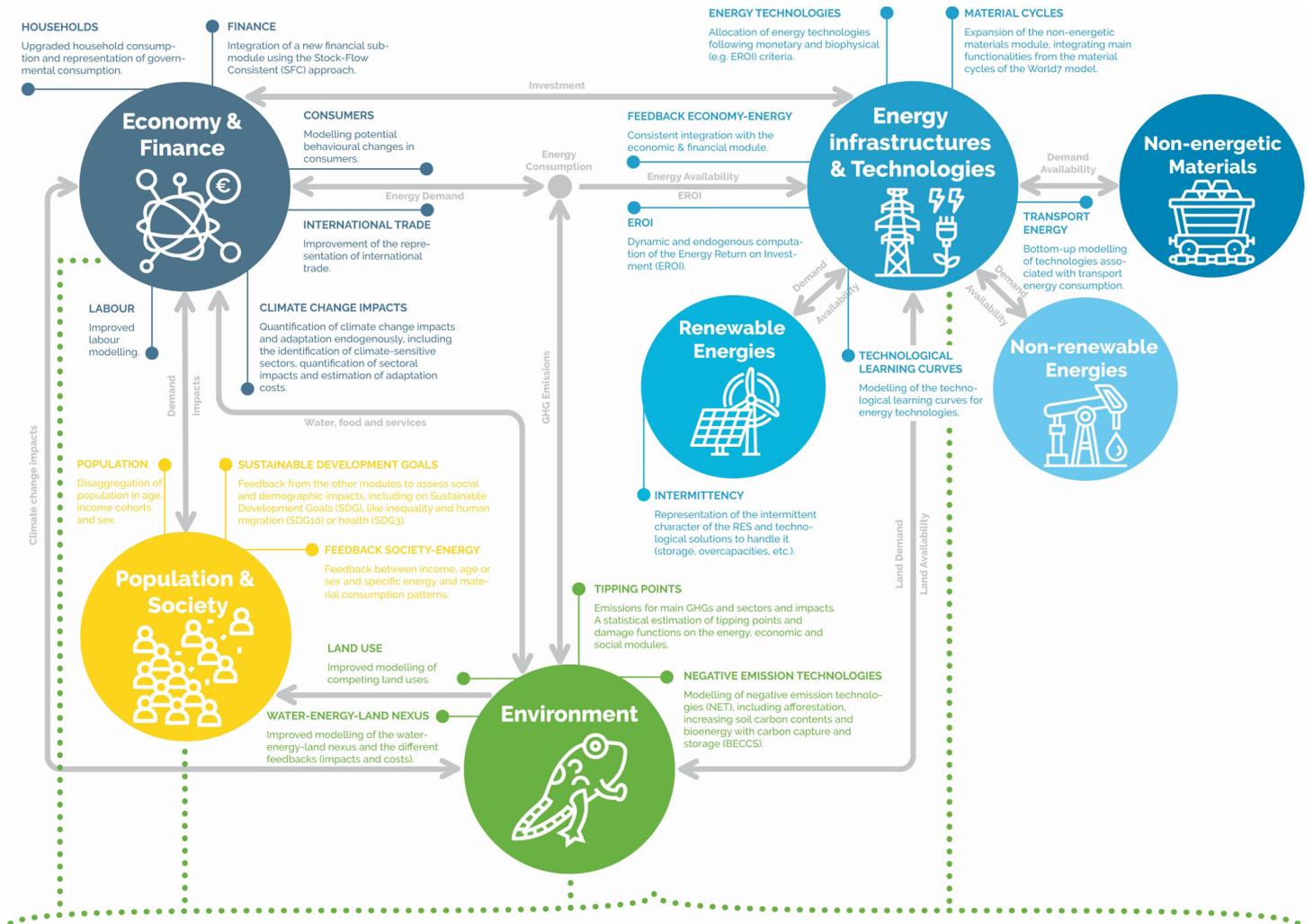
Expanding the geographical coverage and detail by creating a new multi-regional world model with 7 global regions and integrating the 28 EU countries.

Improving IAMs by increasing the detail and precision of existing modules and adding new ones.

Integrating relevant functionalities from other models and comparing modelling results.

Model improvements

The Intergated Assessment Models' robustness, transparency, accessibility, usability and reliability will be improved:



Policies and Scenarios

Staking a claim

To ensure that LOCOMOTION's models meet the needs of stakeholders, it will involve civil society, policymakers and other parties right from the word go. The project plans to find out the priorities and preferences of stakeholders to help it develop some of the policy scenarios for its models. It is also planning to co-design the tools mentioned above with the involvement of stakeholders to make them user friendly and relevant.

Those interested in helping shape the features and direction of LOCOMOTION can join its Project Stakeholder Board (PSB) or its Scientific Advisory Board (SAB).

For more information contact: info@locomotion-h2020.eu

Stakeholder groups:	Scientists / modelling experts 	Policy-makers 	Non-Governmental Organisations / Education 
	Open source software in Python with extensive technical documentation Scientific Publications	User-friendly web interface for own analysis Policy briefs and non-technical documentation	User-friendly web interface for own analysis Education and awareness-raising game
	Project Scientific Advisory Board / Presentations at scientific conferences	Project Stakeholder Board / Focus groups / Presentations at public events / Newsletter	