



Explore sustainable European futures

EUCalc project and modeling approach

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Expert Consultation on Scenarios for Decarbonising European Industries



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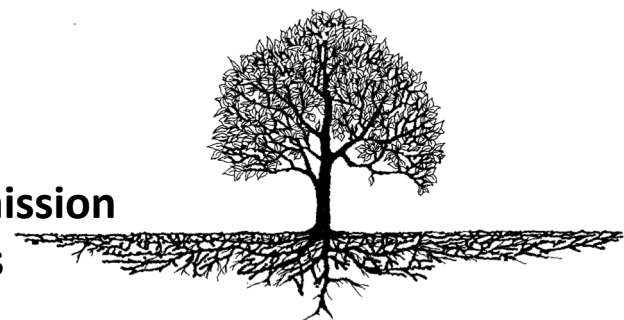
Official title:	EU Calculator: trade-offs and pathways towards sustainable and low-carbon European Societies
Acronym:	EUCALC
Funding:	European Union's Horizon 2020 research and innovation programme (contract no. 730459)
Instrument:	Research and Innovation Action (RIA)
EU contribution:	5,283k€
Duration:	3 years
Start Date:	1st November 2016
URL:	www.european-calculator.eu
Sister Projects:	REINVENT and INNOPATH

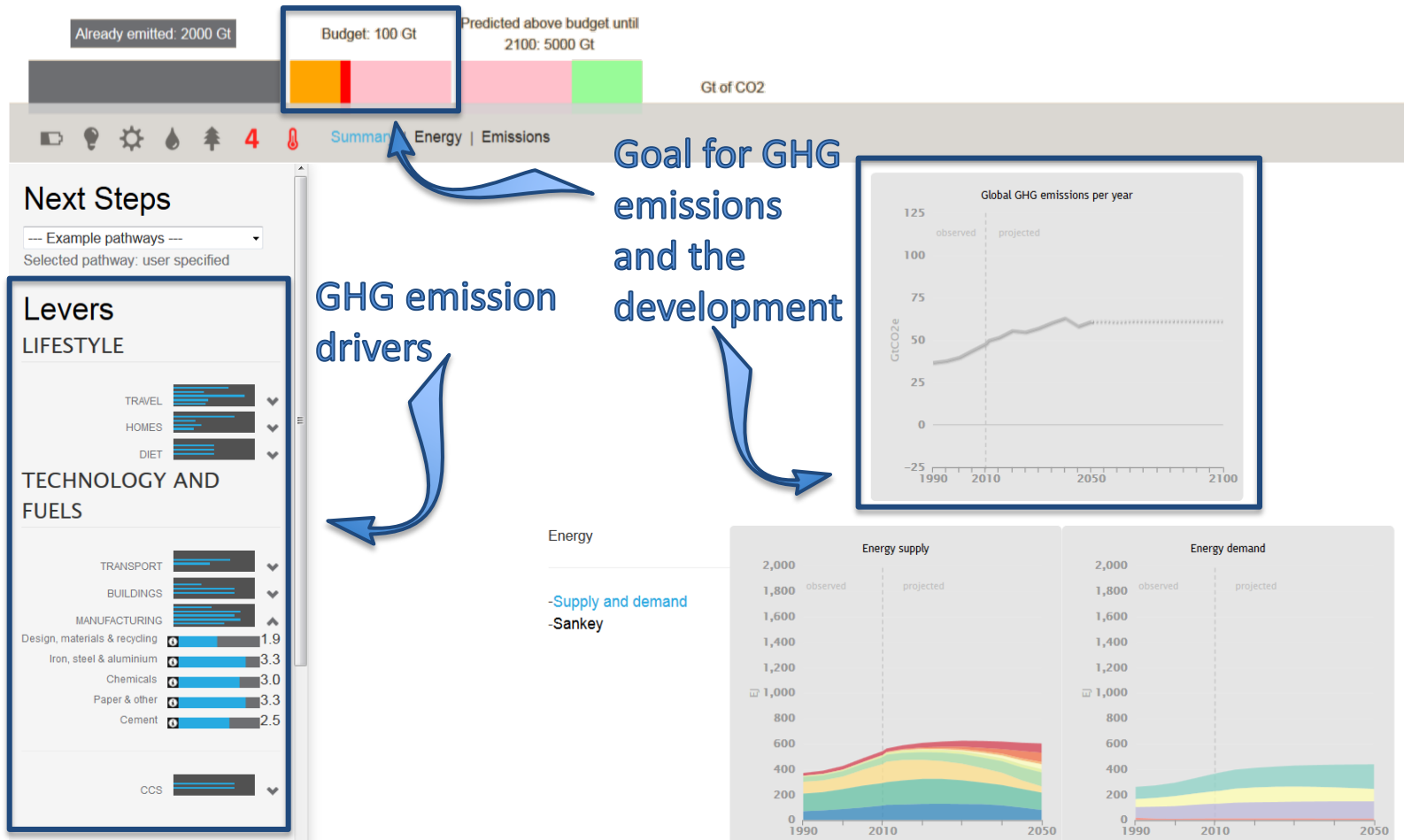
Facilitate negotiations e.g. on burden sharing

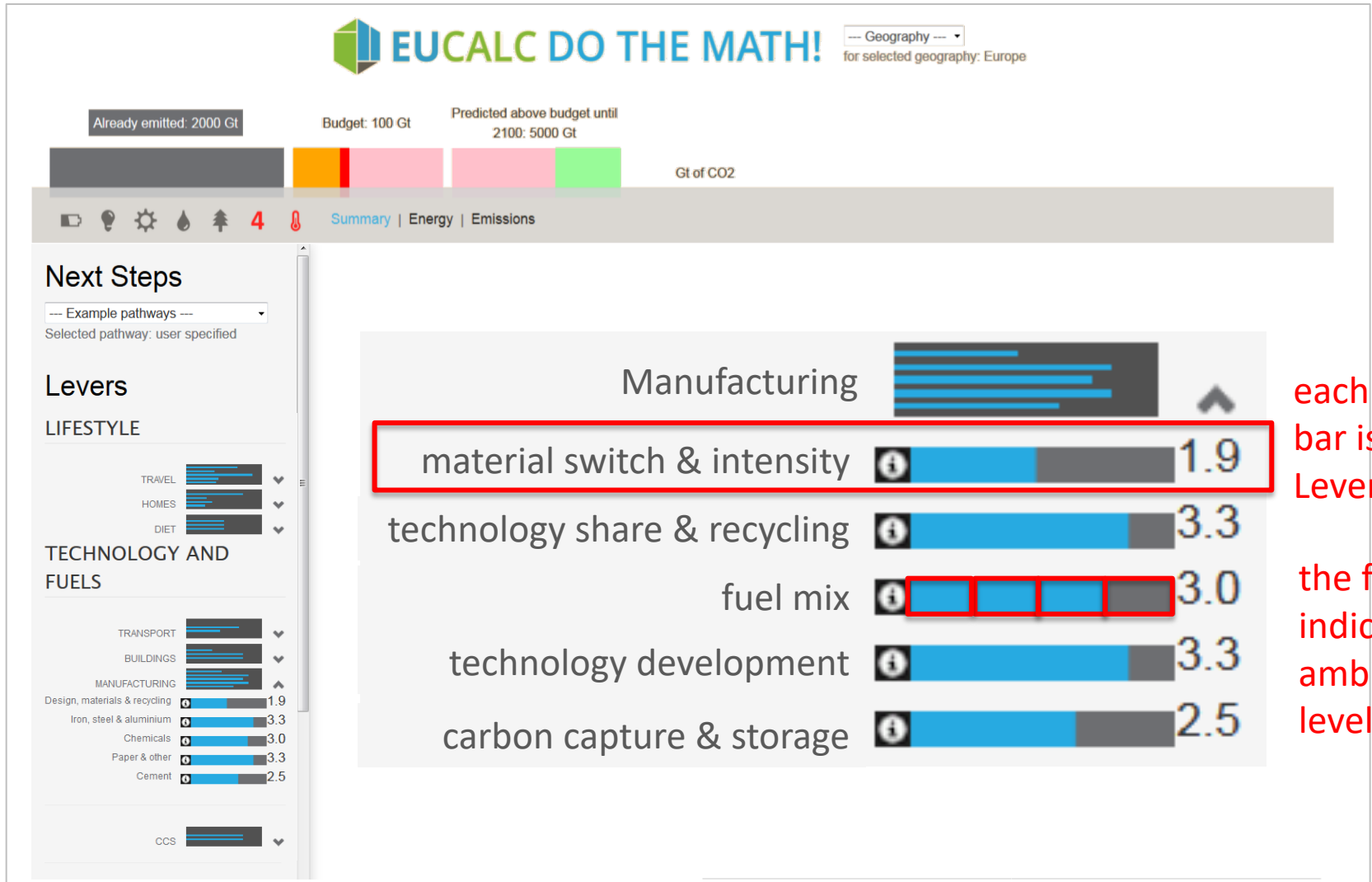


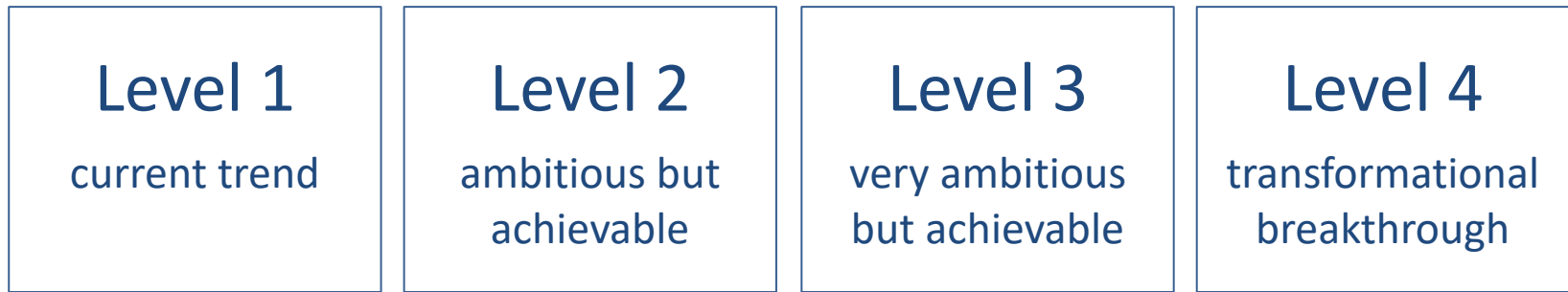
Compare sector contribution

Educate
on points of emission
and root causes









Already emitted: 2000 Gt

Budget: 100 Gt

Predicted above budget until
2100: 5000 Gt

Gt of CO2

Example pathway: IEA 6DS

Summary | Energy | Emissions

Next Steps

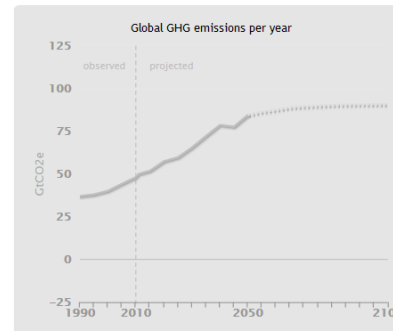
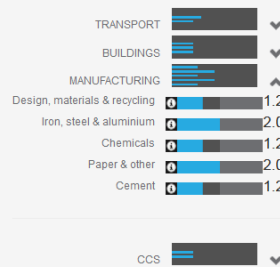
Example pathways
Selected pathway: IEA 6DS (approx.)

Levers

LIFESTYLE

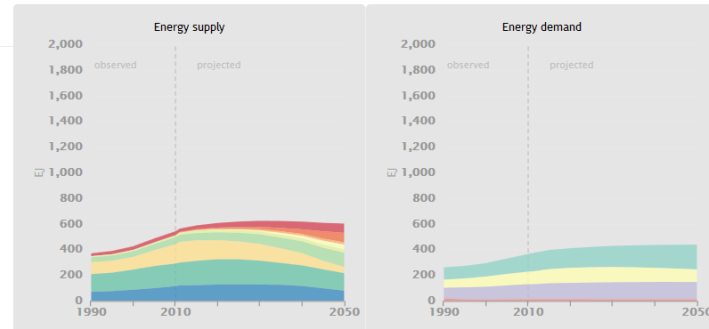


TECHNOLOGY AND FUELS



Energy

-Supply and demand
-Sankey



Already emitted: 2000 Gt

Budget: 100 Gt

Predicted above budget until
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Gt of CO₂

Example pathway: IEA 6DS
+ manufacturing level 4



Summary | Energy | Emissions

Next Steps

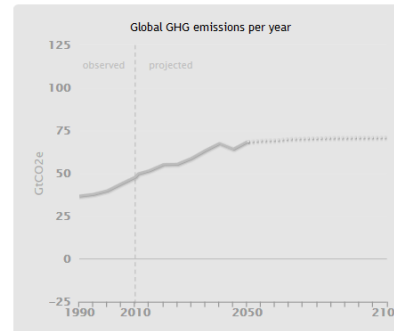
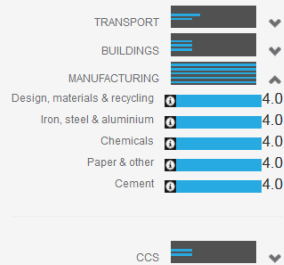
--- Example pathways ---
Selected pathway: user specified

Levers

LIFESTYLE

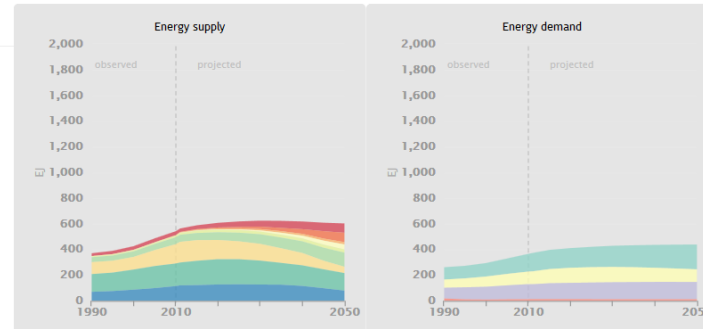


TECHNOLOGY AND FUELS



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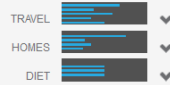
Summary | Energy | Emissions

Next Steps

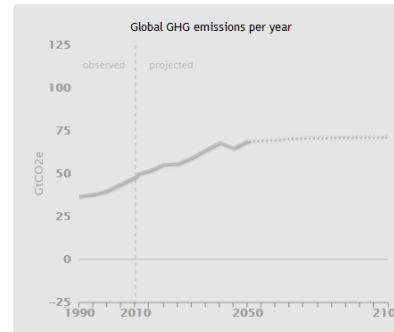
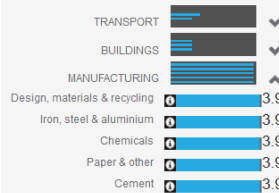
--- Example pathways ---
Selected pathway: user specified

Levers

LIFESTYLE



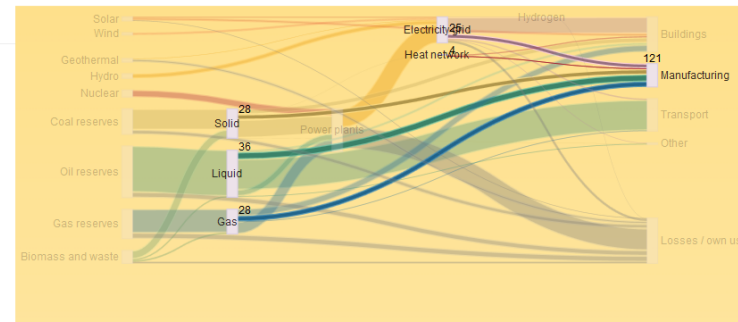
TECHNOLOGY AND FUELS




Energy


- Supply and demand
- Sankey

- Open detailed Sankey




Geography: Europe

Already emitted: 2000 Gt Budget: 100 Gt Predicted above budget until 2100: 5000 Gt



Gt of CO2

Example pathway: IEA 6DS

Summary | Energy | Emissions

Next Steps

Selected pathway: IEA 6DS (approx.)

Levers

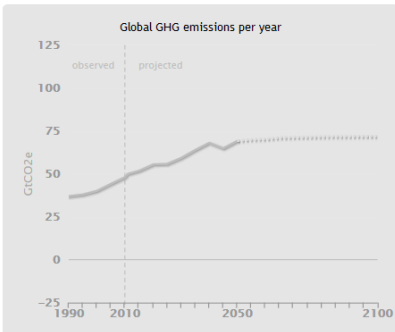
LIFESTYLE

- TRAVEL
- HOMES
- DIET

TECHNOLOGY AND FUELS

- TRANSPORT
- BUILDINGS
- MANUFACTURING
- Design, materials & recycling: 1.2
- Iron, steel & aluminium: 2.0
- Chemicals: 1.2
- Paper & other: 2.0
- Cement: 1.2
- CCS

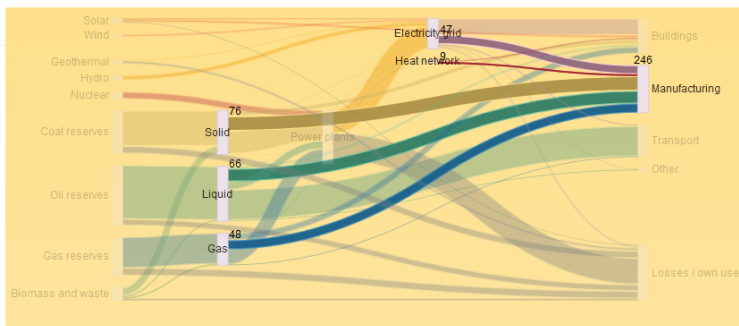
Global GHG emissions per year



Energy Sankey

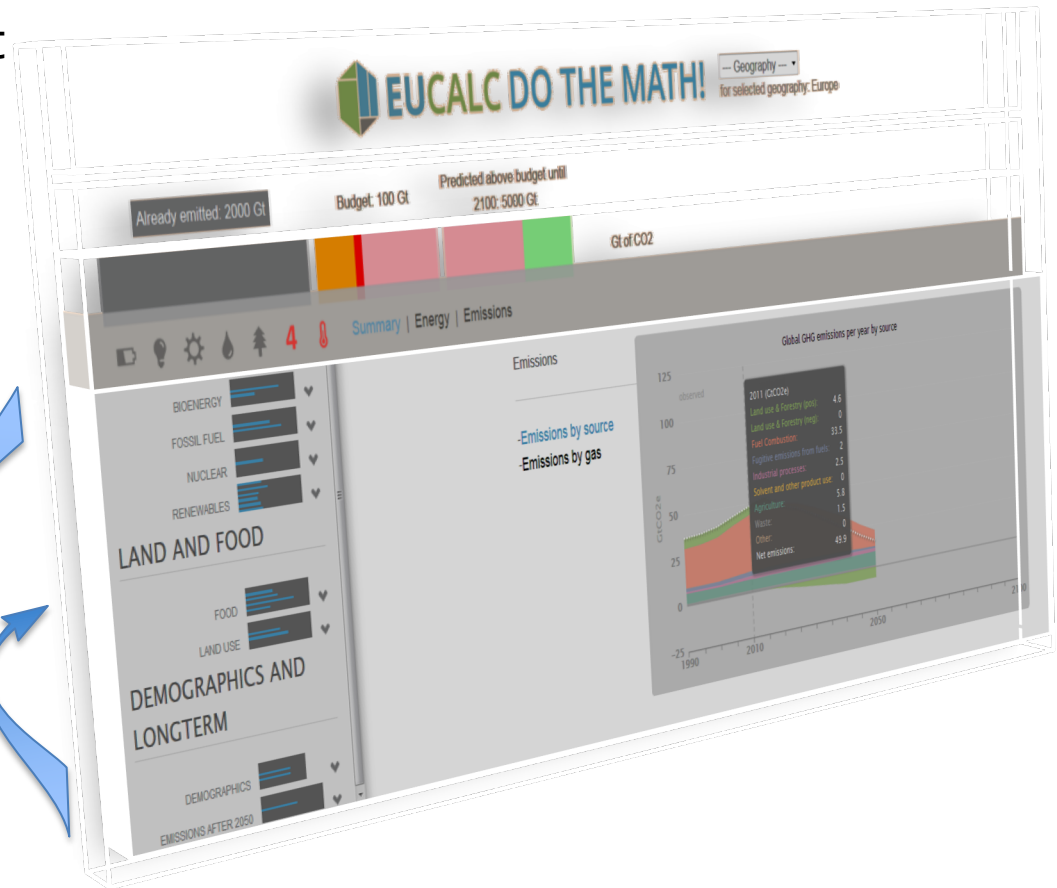
Supply and demand

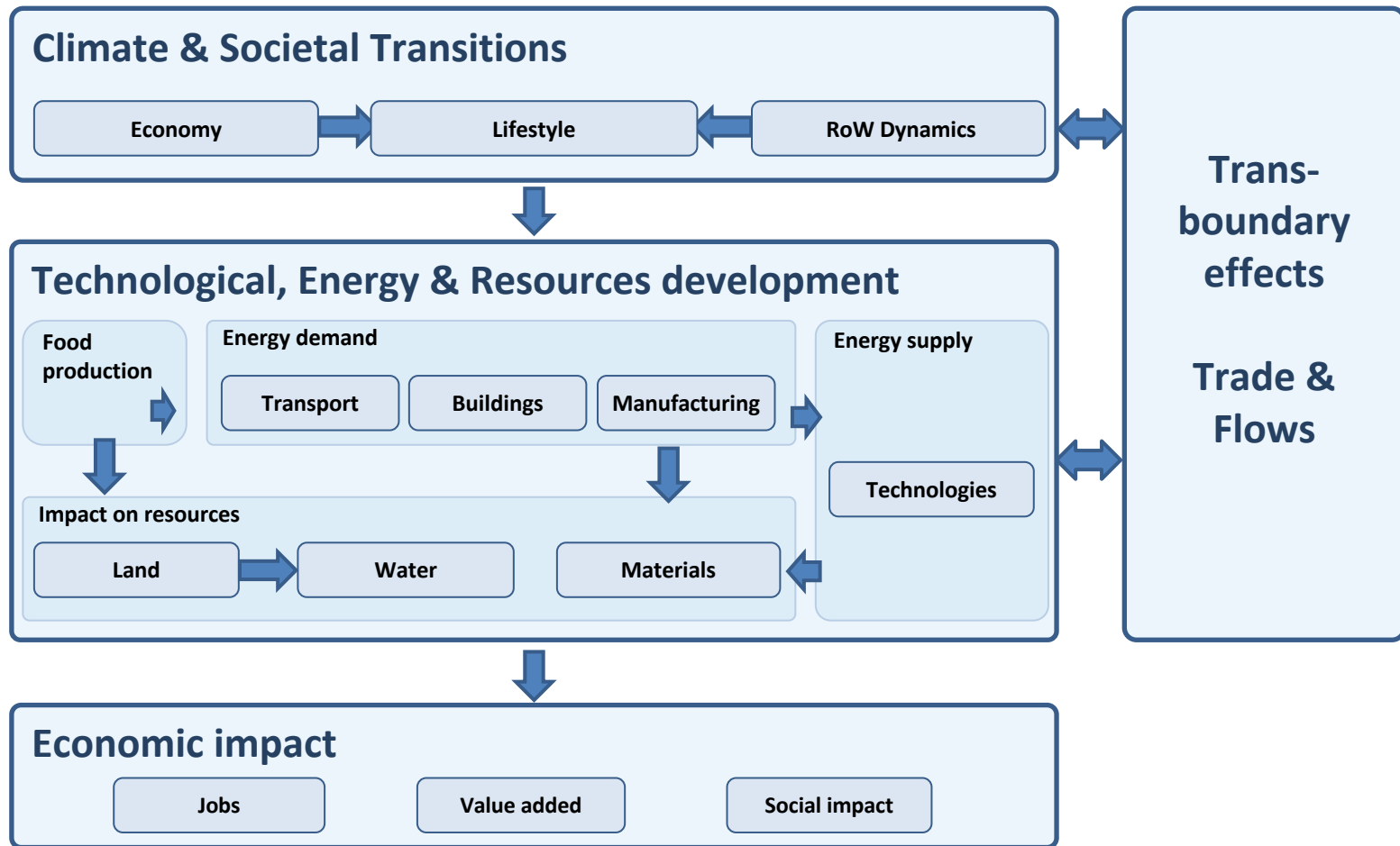
Open detailed Sankey



EUCalc Model is
logic behind provides

- results based on user input
- integrates the
 - transboundary effects between EU & RoW,
 - interlinkages between sectors, such as buildings and industry



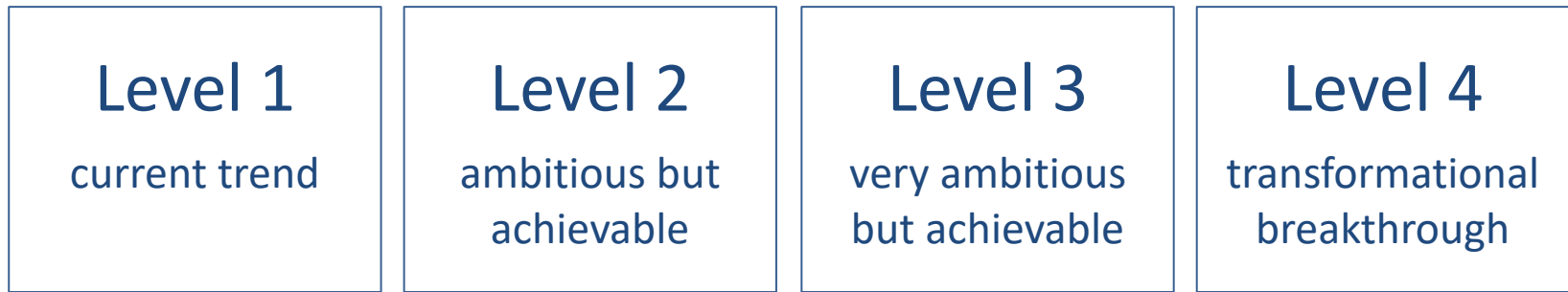


Reflections on the
model

User perspective

Verification of
approach and data
for buildings





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THANK YOU
FOR YOUR
ATTENTION.





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