DDP DEEP DECARBONIZATION PATHWAYS

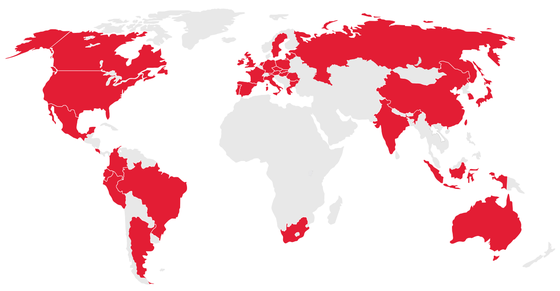
https://ddpinitiative.org

IDDRI

BUILDING CAPACITIES TO INFORM
SHORT-TERM CHOICES TOWARD DEEP DECARBONIZATION

WE ALL KNOW WHAT WE WANT TO ACHIEVE: THE CHALLENGE LIES IN DETERMINING HOW TO DO IT, WHAT IS THE NECESSARY SEQUENCE OF ACTIONS, STARTING TODAY, AND DOING IT IN A WAY THAT INCREASES THE LIKELIHOOD OF IMPLEMENTATION

The **DDP** initiative encourages the development and the structuring of a global scientific community of analysts working on the assessment of country-driven deep decarbonization strategies compatible with the Paris Agreement based on detailed sectoral analysis and stakeholder engagement.



Ongoing local projects

DDP LAC
Argentina, Colombia, Costa Rica, Ecuador, Mexico And Peru

DDP BIICS
Brazil, China, India, Indonesia, and South Africa

DDP EU
Europe's 28 member states

Next In the DDP initiative

DDP Africa, DDP-Central Asia,
DPP with Companies,
DPP with The Investment Community

THE STOYLINES

Describes the evolution of decarbonization drivers in the language of decisionmakers covering the economic, demographic, technical, organisational, and behavioural dimensions.

THE DASHBOARD

Provides a quantitative representation of the pathway, showing its components and effects, through selected indicators. These are the most relevant for comparison and permit structuring a policy debate.

THE PATHWAYS

At country-level

Inform countries "long-term low emission development strategies" and the revision of NDCs to succesfully implement the Paris Agreement.

At global-level

The common approach allows for comparison in a transparent way, enabling a constructive debate, peer learning and mutual understanding of other countries' strategies to identify useful cooperation areas (e.g. joint R&D efforts).

THE DDPP PATHWAYS DESIGN FRAMEWORK

(CF RECENT PUBLICATION IN NATURE CLIMATE CHANGE)

STORYLINES

COUNTRY-DRIVEN STRATEGIES
SECTORS AND DRIVERS OF DECARBONISATION

1. Demography and economics
2. Human settlement, land development and spatial organization
3. Sociocultural practices and lifestyles
4. Technological development of vehicles
5. Fuel generation and carbon content
6. Penetration of alternative motorizations in the car stock
7. Income dedicated to transport, modal distribution and costs
8. Speed, infrastructure and time dedicated to transport

COMPUTATION

QUANTITATIVE ASSESSMENT TOOLS, INCLUDING NATIONAL-SCALE MODELS

DASHBOARD

COMPARABLE SCENARIO DATA REPORTING

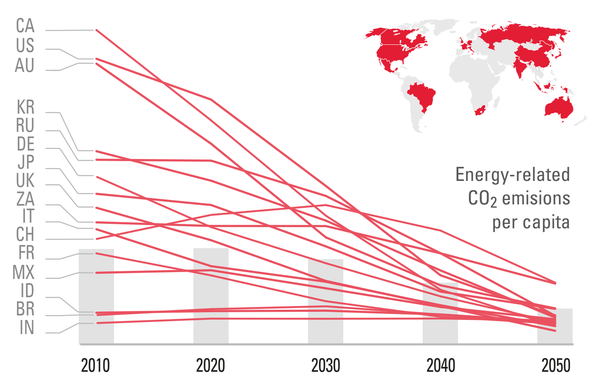
Indicators to 2050		2010	2020	2030	2040	2050
Emissions drivers	Population Energy intensity					
CO2 Emissions	Road oil Air oil					
Population and mobility	Metropolitan population Constrained km					
Modal shares •••	Private mobility Public transport •••					

CHECKING AGAINST BENCHMARKS OVER TIME

GLOBAL GHG NEUTRALITY ACHIEVED BETWEEN 2050 AND 2070
NATIONAL AND SECTORAL BENCHMARKS SATISFIED?

PATHWAYS

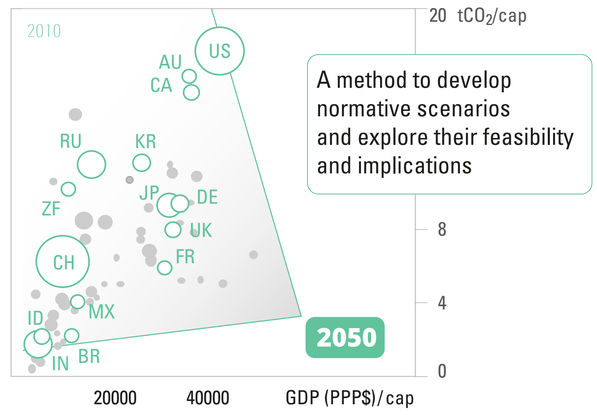
CONSTRUCTIVE DEBATE AND COOPERATION



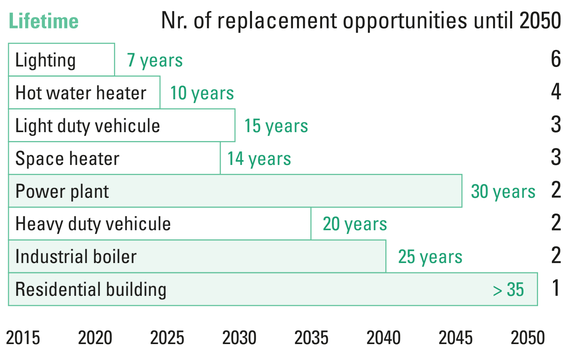
GLOBAL-SCALE ENABLING CONDITIONS
NATIONAL POLICY PACKAGES
INFRASTRUCTURE AND INVESTMENT NEEDS

KEY VALUE ADDED OF THE METHOD

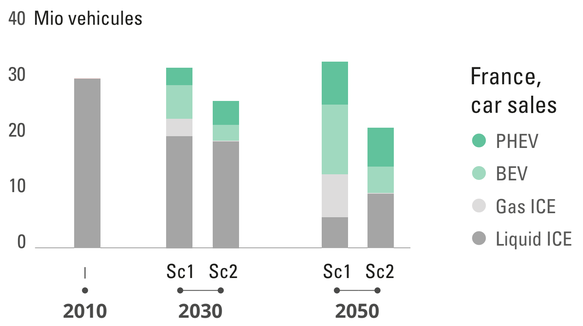
Connecting long-term futures to the present to inform short-term decisions (backcasting)



Taking into account inertias and risks of lockins

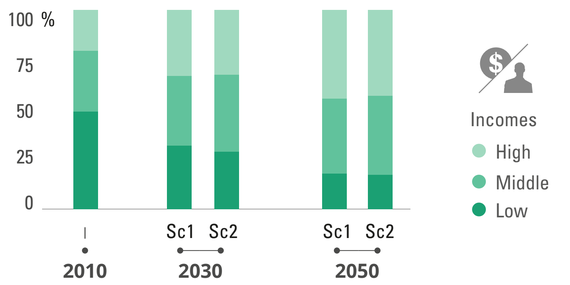


Describing explictly the physical content of alternative trajectories towards the objective

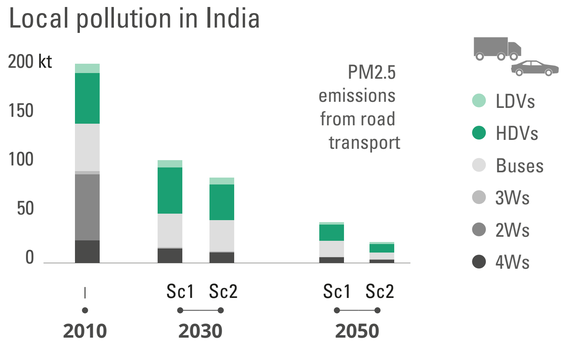


Articulating deep decarbonization with domestic development priorities

Inequalities in South Africa



Local pollution in India



EFFECTIVELY REACHING NET ZERO REQUIRES A TAILOR-MADE APPROACH

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