



Growth, Investment
and the Low-Carbon
Transition

Part II: Strategic Importance of Low Carbon Development and Key
Principles of its Implementation

Investing in Climate, Investing in Growth

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Investing in Climate, Investing in Growth :
in support of the 2017 German presidency of the G20



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and the Low-Carbon
Transition

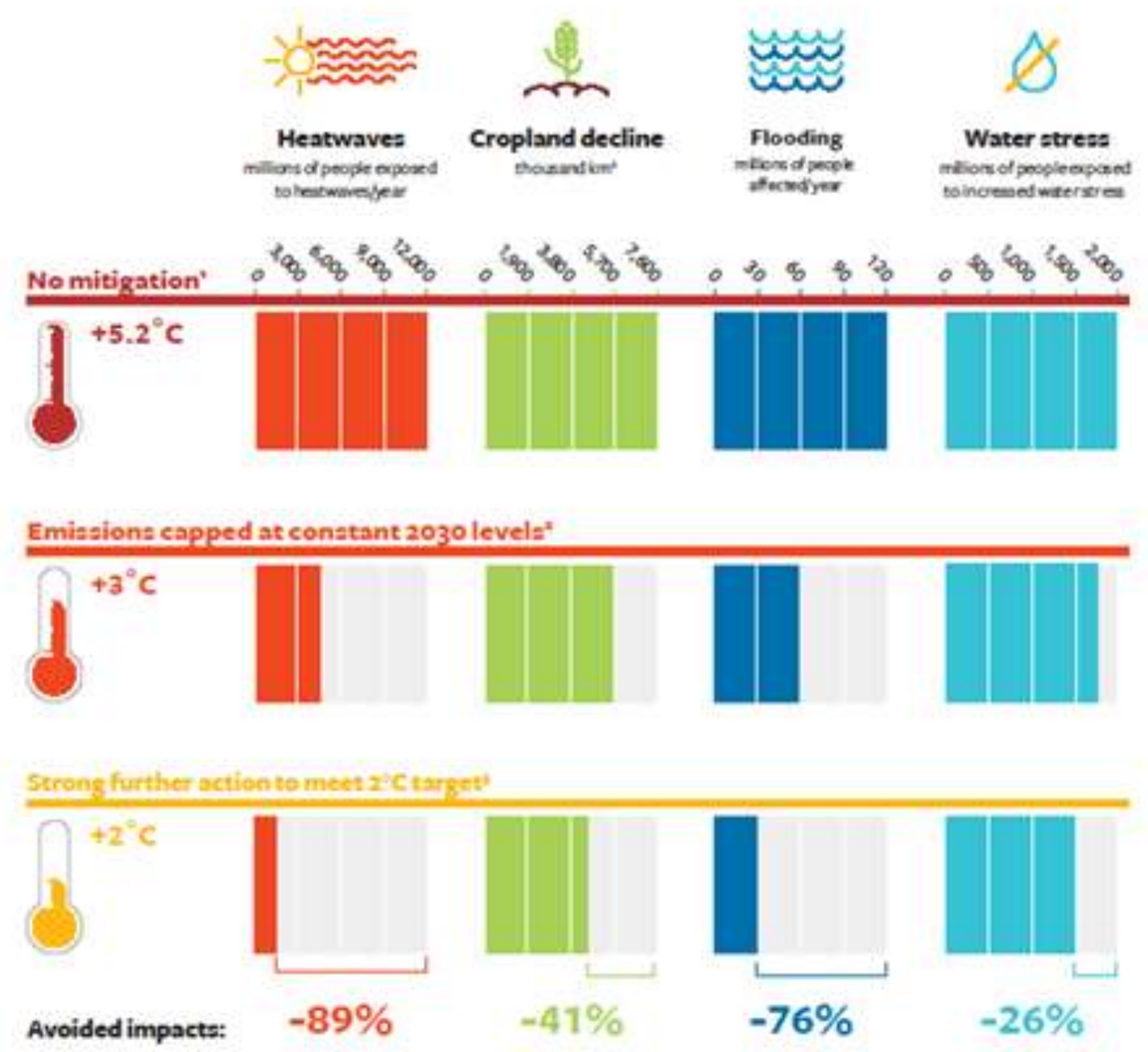


“Boosting economic growth does not mean locking the world into a high-emissions future, provided pro-growth reforms are combined with coherent climate policy and alignment of policies across the economy “

The benefits of mitigation



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Delivering on Paris : countries' pathways to vary depending on their socio-economic context

CO₂ emissions from energy
2010 = 100



Based on 66% chance of staying below 2C

Political economy

- Carbon entanglement
- Energy security and stranded assets
- Inclusive, just transition

Sectoral issues

- Energy vs. AFOLU emissions
- CO₂ vs other gases/pollutants
- Heavy industry



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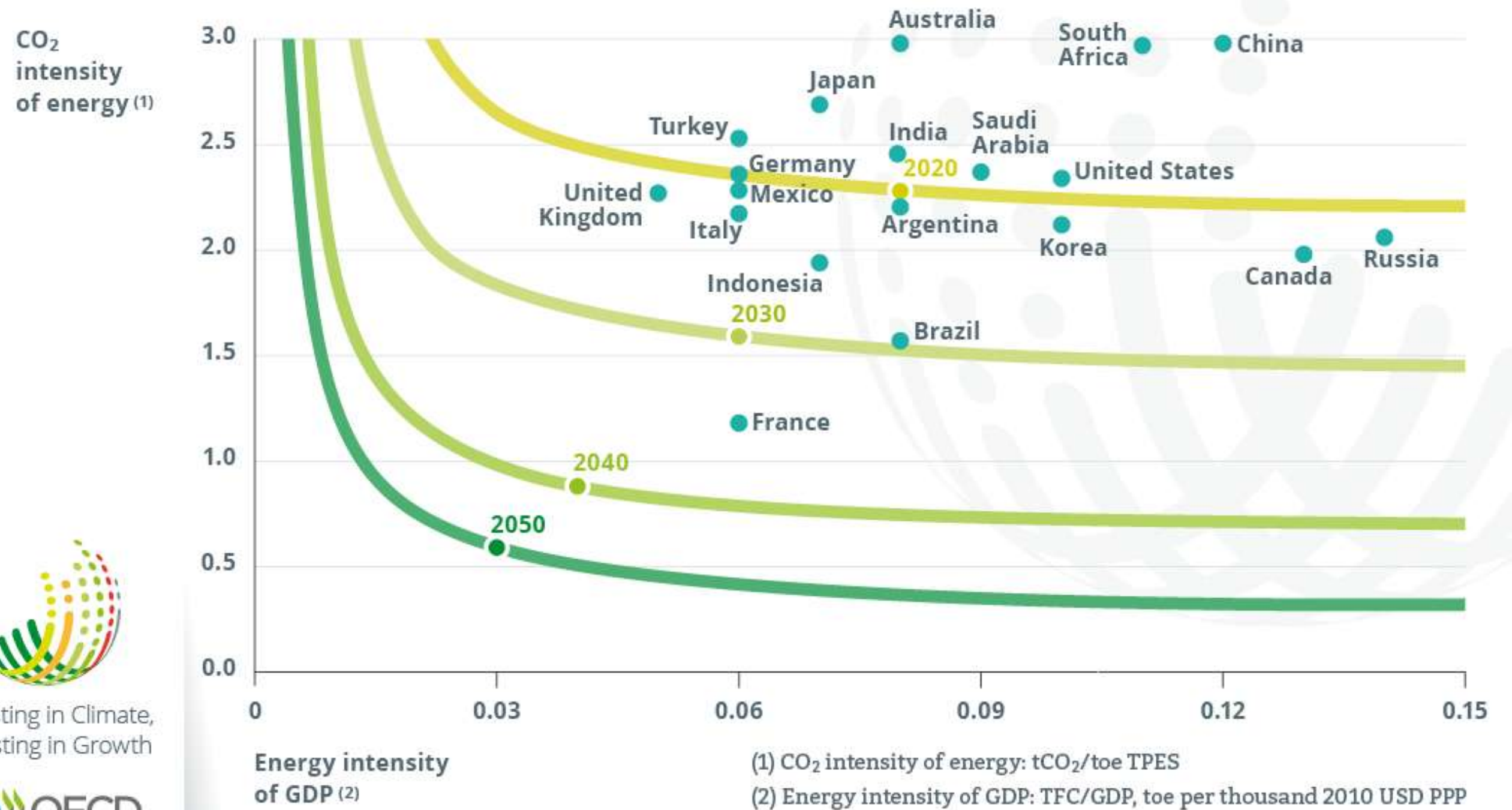


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G20 countries face different challenges in forging low-emission pathways

CO₂ intensity of energy and energy intensity of GDP are key determinants of CO₂ emission



(1) CO₂ intensity of energy: tCO₂/toe TPES

(2) Energy intensity of GDP: TFC/GDP, toe per thousand 2010 USD PPP



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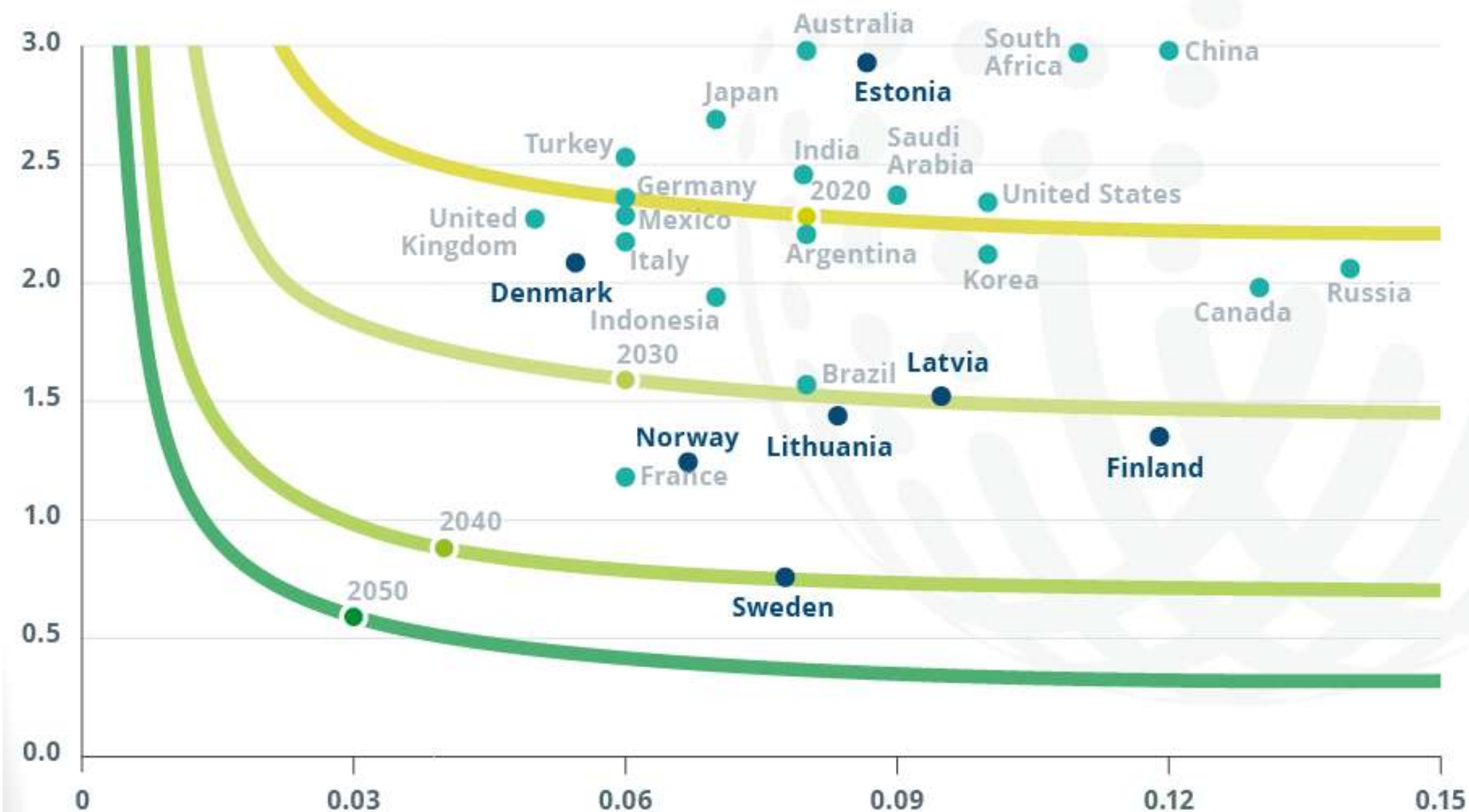
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G20 countries face different challenges in forging low-emission pathways

CO₂ intensity of energy and energy intensity of GDP are key determinants of CO₂ emission

CO₂
intensity
of energy ⁽¹⁾



Energy intensity
of GDP ⁽²⁾

(1) CO₂ intensity of energy: tCO₂/toe TPES

(2) Energy intensity of GDP: TFC/GDP, toe per thousand 2010 USD PPP



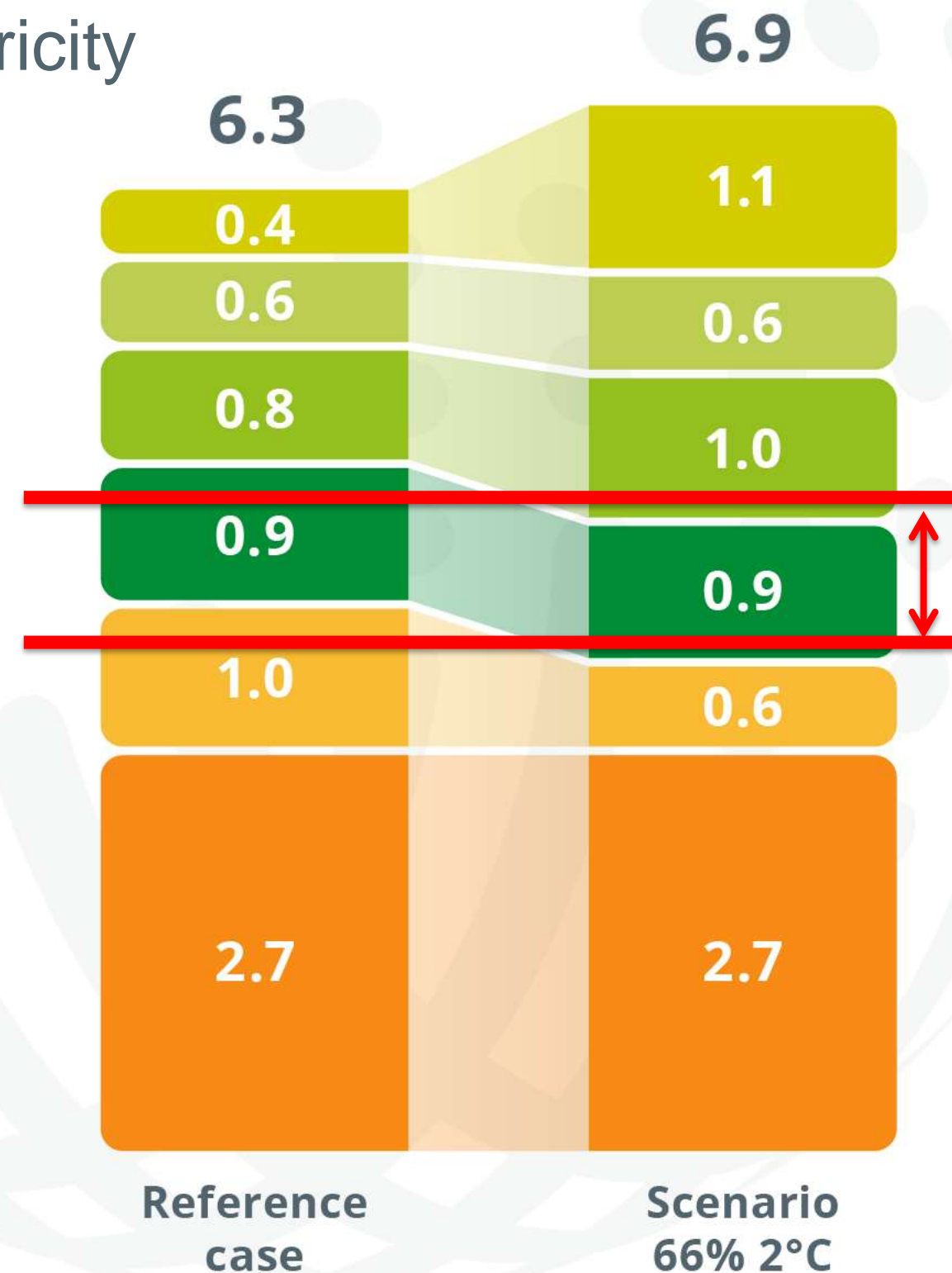
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An ambitious 2°C scenario requires a 10% increase in infrastructure investment ...

Increased expenditures are needed in energy demand and electricity

Infrastructure investment (in USD trillion per year)

- Energy demand 
- Telecoms 
- Power and electricity T&D 
- Water & sanitation 
- Primary energy supply chain 
- Transport 



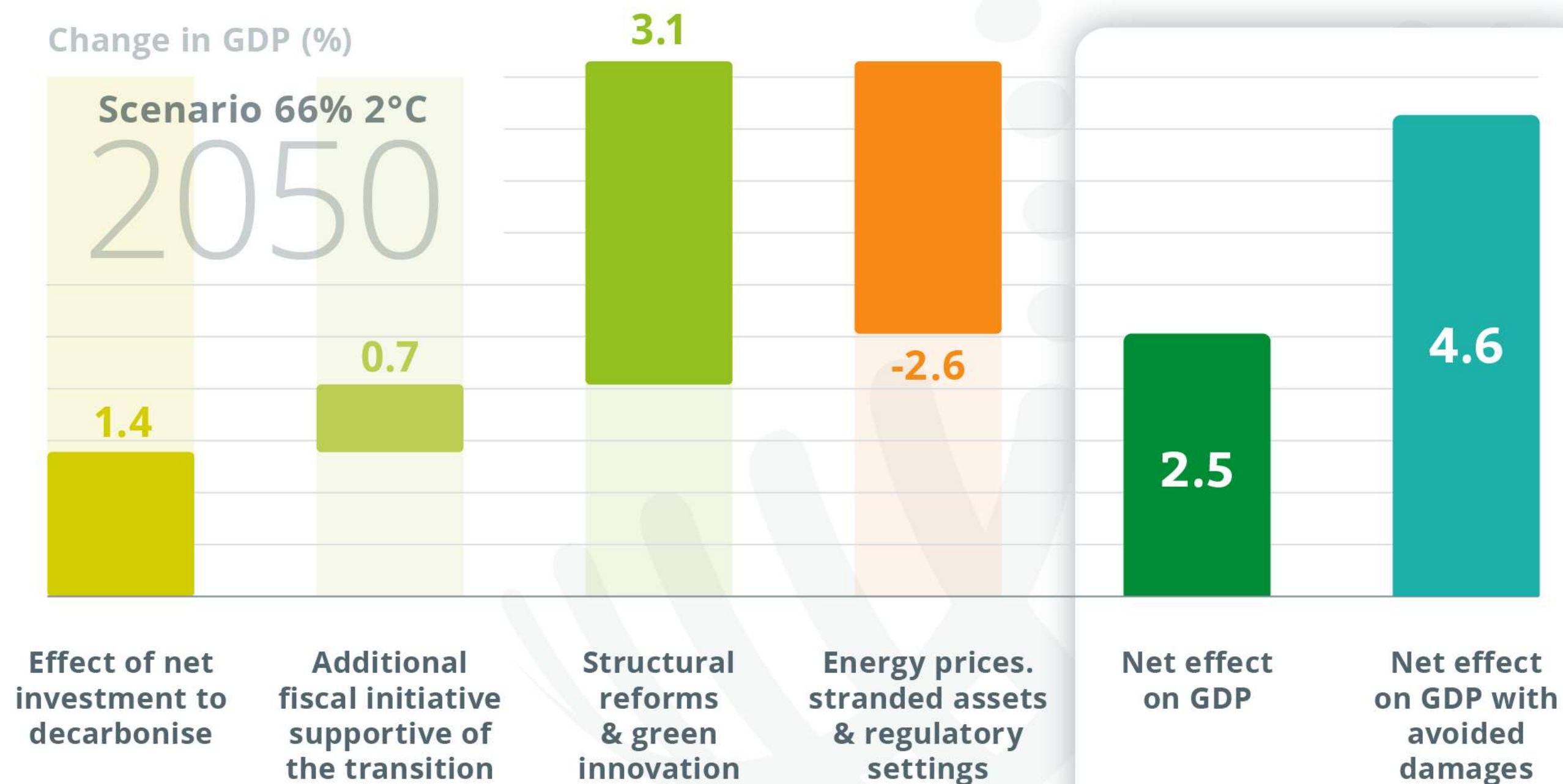
USD 3.4 -4.4 trillion:
Current total infrastructure spending



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Ambitious climate policies are compatible with growth

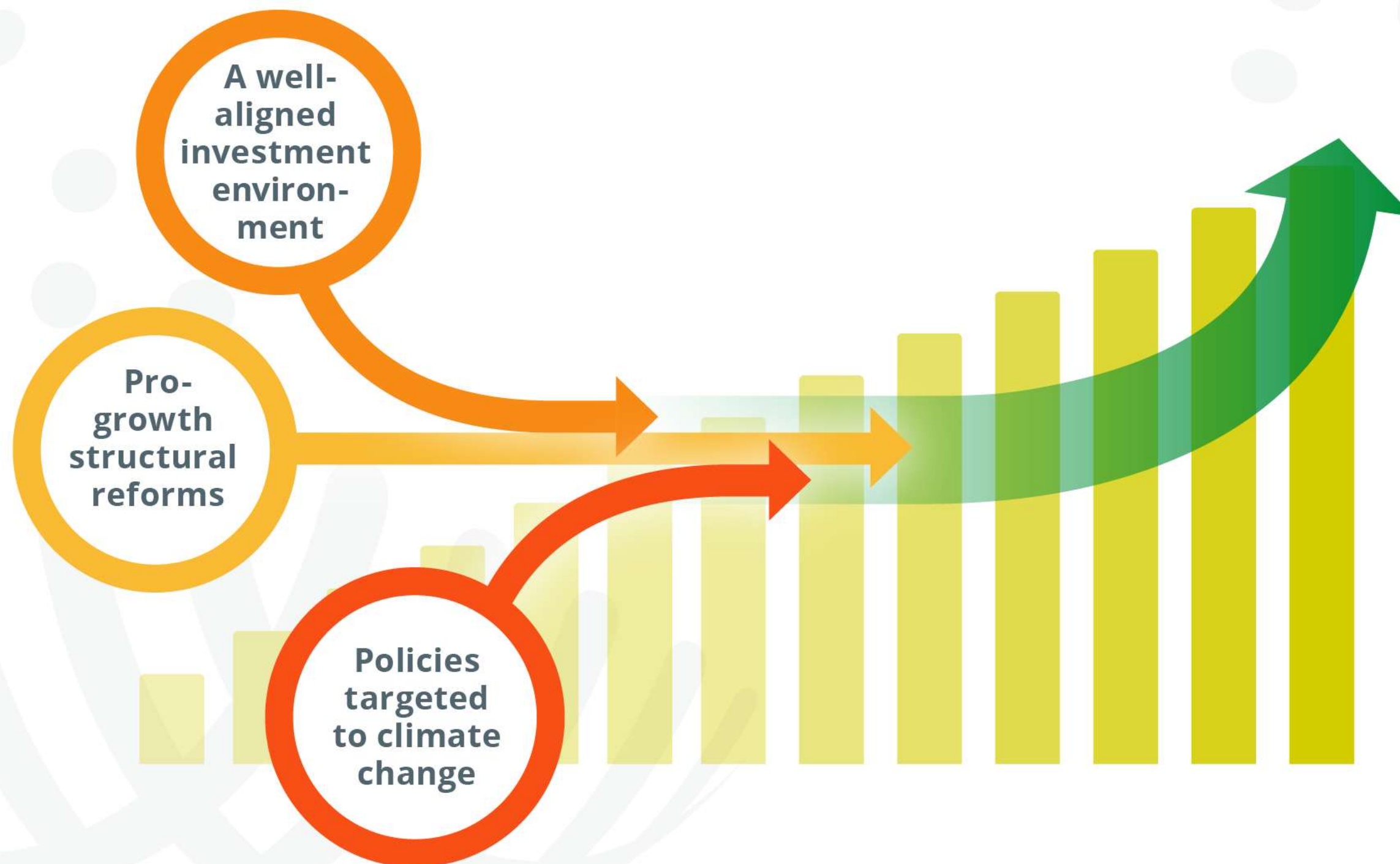
The combined actions of more ambitious climate policies and economic reform still deliver a net GDP increase in the long run.





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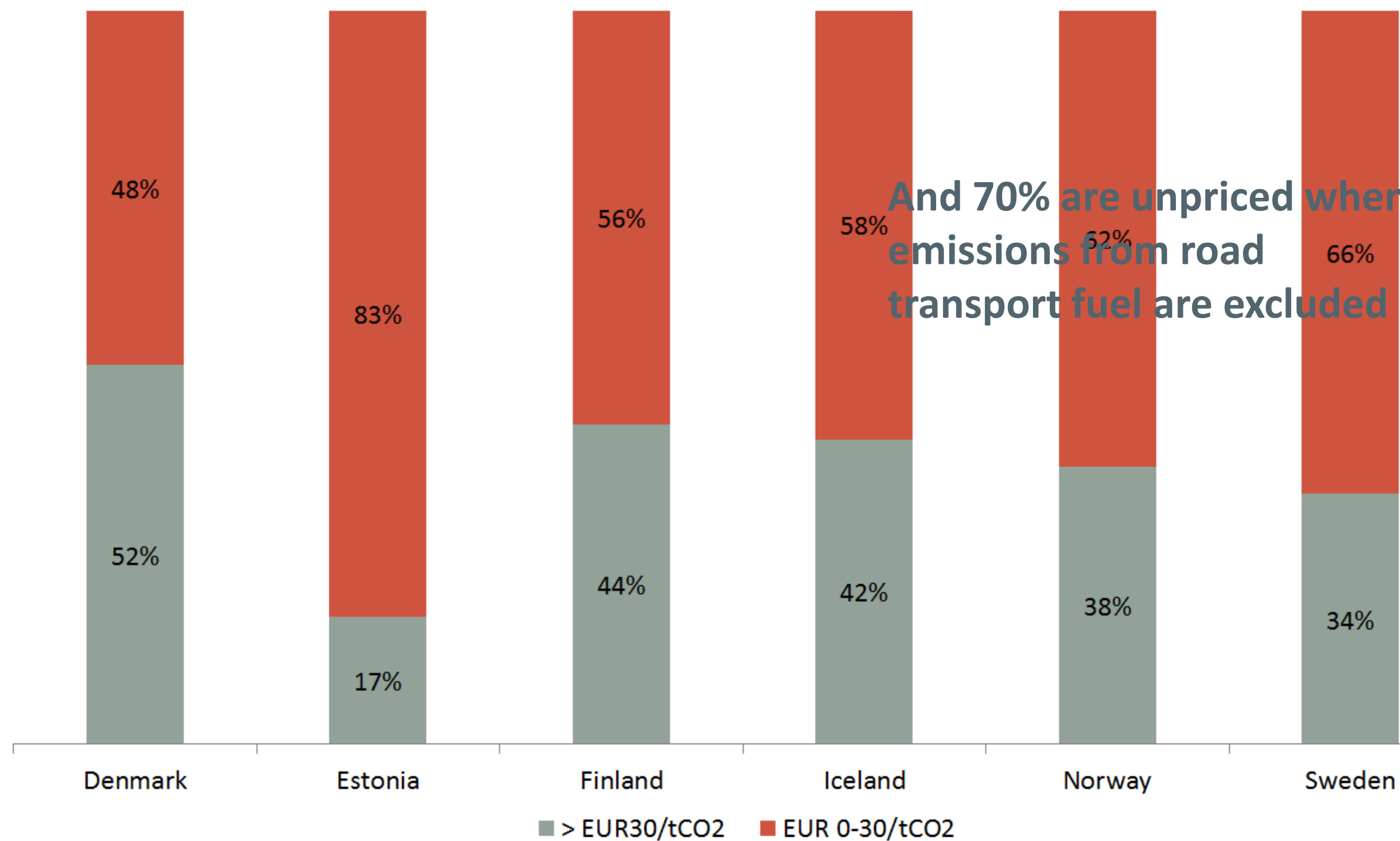
Three components of a well-aligned policy framework for climate and growth





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Carbon pricing should be at the heart of low-carbon policy, but more than 60% of emissions in the G20 are not priced at all





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Mobilising financing for the transition

- Increasing private sector investment in low-carbon infrastructure will be essential to achieve the transition, beyond the successes made with conventional renewables
- **Overcoming barriers to private infrastructure investment** generally, and specifically improving understanding of risks and returns related to low-carbon infrastructure
- Policy recommendations related to financing include:
 - Supporting development and piloting of **innovative financial instruments**
 - Taking steps towards a **financial system** that fully accounts for climate factors
 - Using **public development banks** to better mobilise public and private finance as well as influencing policy conditions in developing countries



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“The Leaders of the other G20 members state that **the Paris Agreement is irreversible**. We ... note the **OECD's report “Investing in Climate, Investing in Growth”**. We reaffirm our **strong commitment to the Paris Agreement**, moving swiftly towards its full implementation ...”

Full report and further information at

<http://oe.cd/G20climate>

Thank you for your attention



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Electricity generation

