

A G20 growth agenda: Carbon pricing for financing infrastructures

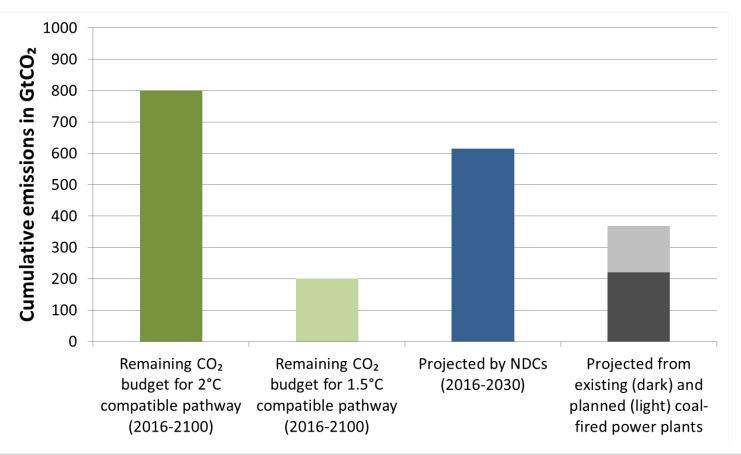
Prof. Dr. Ottmar Edenhofer

Berlin, 15 March 2017



The 2°C budget does not leave any leeway

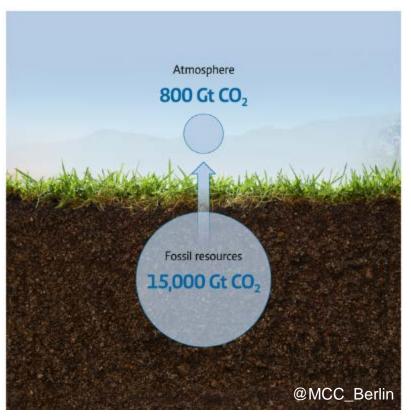
 Cheap and abundant coal is the driver of a "re-carbonisation" of the energy system in some parts of the world





The challenges for the G20

Overuse of the global commons



Underprovision of public infrastructure



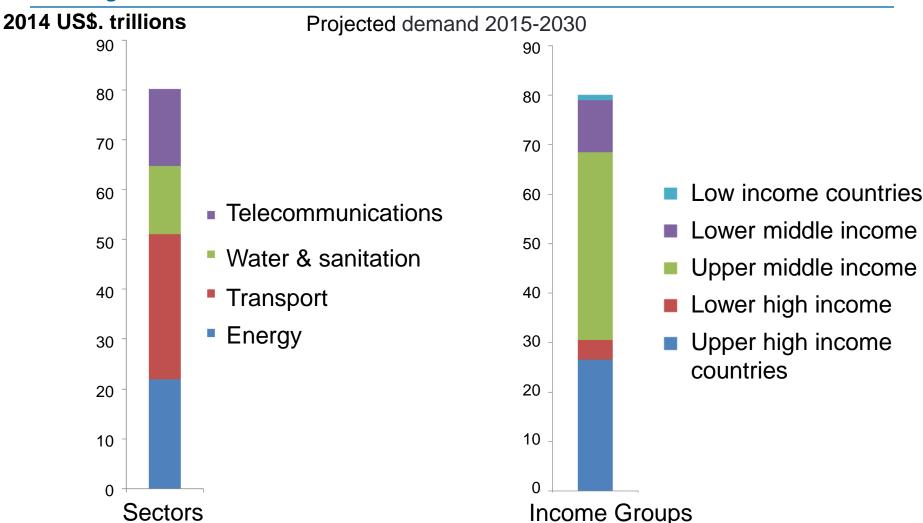








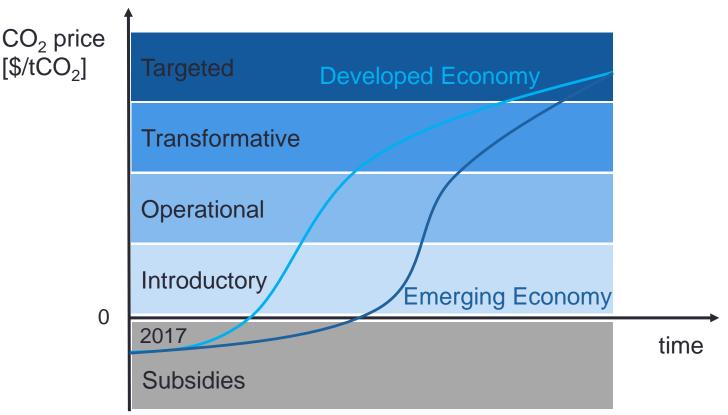
Projected cumulative infrastructure demand





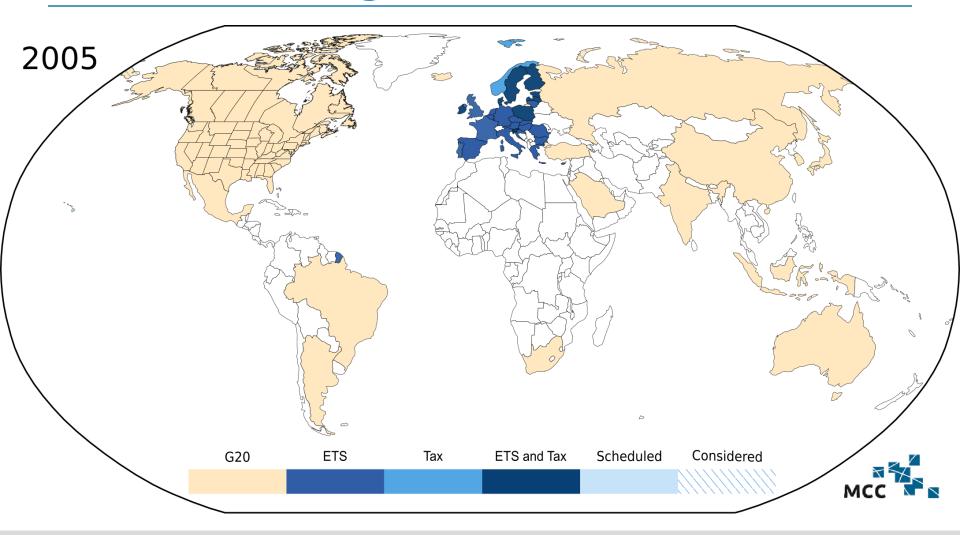
Carbon pricing along common but differentiated responsibilities

 Carbon pricing (with taxes or emission trading systems) is essential because of the oversupply of fossil fuels.



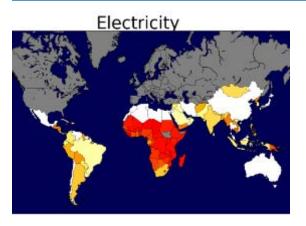


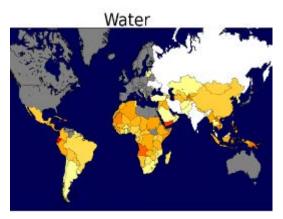
Carbon Pricing in G20 Countries

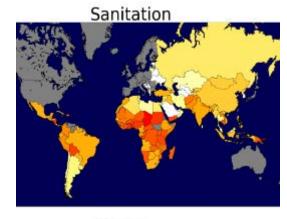


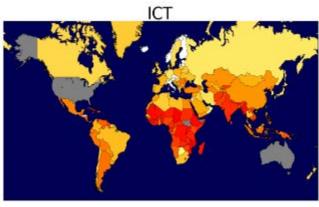


Carbon pricing revenues are sufficient to finance universal access to infrastructure



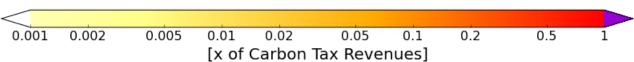






Except for roads where Africa's & Latin America's costs still partially exceed revenues

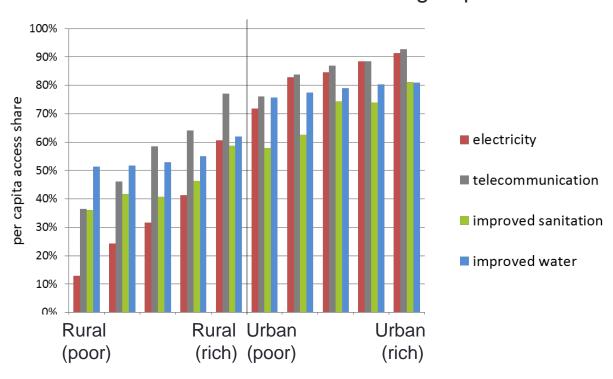






Carbon pricing and access to infrastructure – MCC Example of Nigeria

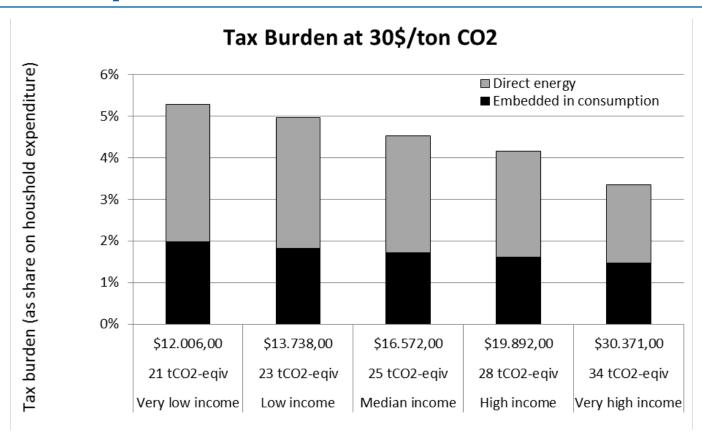
Infrastructure access across income groups



- Expansion of infrastructure can be designed to benefit low-income earners
- Example Nigeria: low-income earners so far severely disadvantaged concerning access to infrastructure



Carbon prices: direct distributional effects

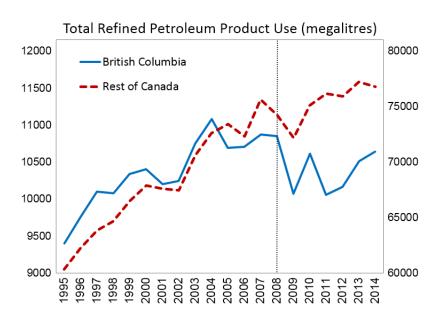


- Low-income earners have a higher percentage of CO₂-consumption
- Direct effect of carbon prices is regressive

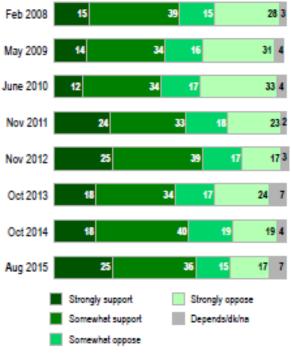


Carbon pricing and tax reduction – Example of British Columbia

- Introduction of a carbon tax in 2008:
 - Significant decrease of CO₂-emissions
 - Continuous public support
- Use of revenues: reduction of corporation and income tax









G20 has to combine climate protection and carbon pricing with the SDG agenda

- Reorienting investment strategies to exploit the significant opportunities of low-carbon, climate-resilient infrastructure
- Transforming finance to be an enabler and driver of change
- Phasing out fossil fuel subsidies
- Price carbon broadly while increasing access to sustainable infrastructure to ensure a just transition towards a low-carbon economy



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SUSTAINABLE GOALS















