

Business Engagement in INDCs and the Paris Agreement
OECD Conference Center, Paris

Business Perspectives on INDC Portfolio: Relevance and Benefits of Consultation

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Outline: Business Perspectives on INDCs

- INDCs: What we know and don't know: targets, policies, metrics
- Need to consider economy-wide and global interactions to assess actual effects of INDCs on emissions & economy
- Illustrative *ex ante* analyses of national and global implications
Based on the RITE Integrated Assessment Model (IAM)
- Opportunities for business to inform international processes
(Transparency, Global Stocktake, *ex ante* and *ex post* analyses)

Goal: demonstrate contributions from business engagement and assessment of (I)NDCs—challenges and opportunities to strengthen Paris Agreement

What we know and don't know about INDCs

Many INDCs do not provide clarity on:

- Assumptions that underpin the INDC, e.g. population, GDP, productivity growth, technology and other options...
- Policies to implement action
- Metrics to evaluate outcomes (if not economy-wide emissions)
- Financial (and other) transfers to developing nations

Hinders efforts to inform transparency processes on INDCs now, and on progress and trends (going forward), and future updates to (I)NDCs

Creates challenges for analyses:

- ex ante projections now
- ex post reconciliations of performance later
- Indicators of comparability of effort

Especially if/when when unanticipated developments affect outcomes, e.g., recessions, new technologies, political or natural upsets

Analyses with Integrated Assessment Models (IAMs)

Domestic policy outcomes cannot be assessed sector by sector, or without considering the entire global portfolio: feedbacks and interactions among sectors and across borders are ubiquitous

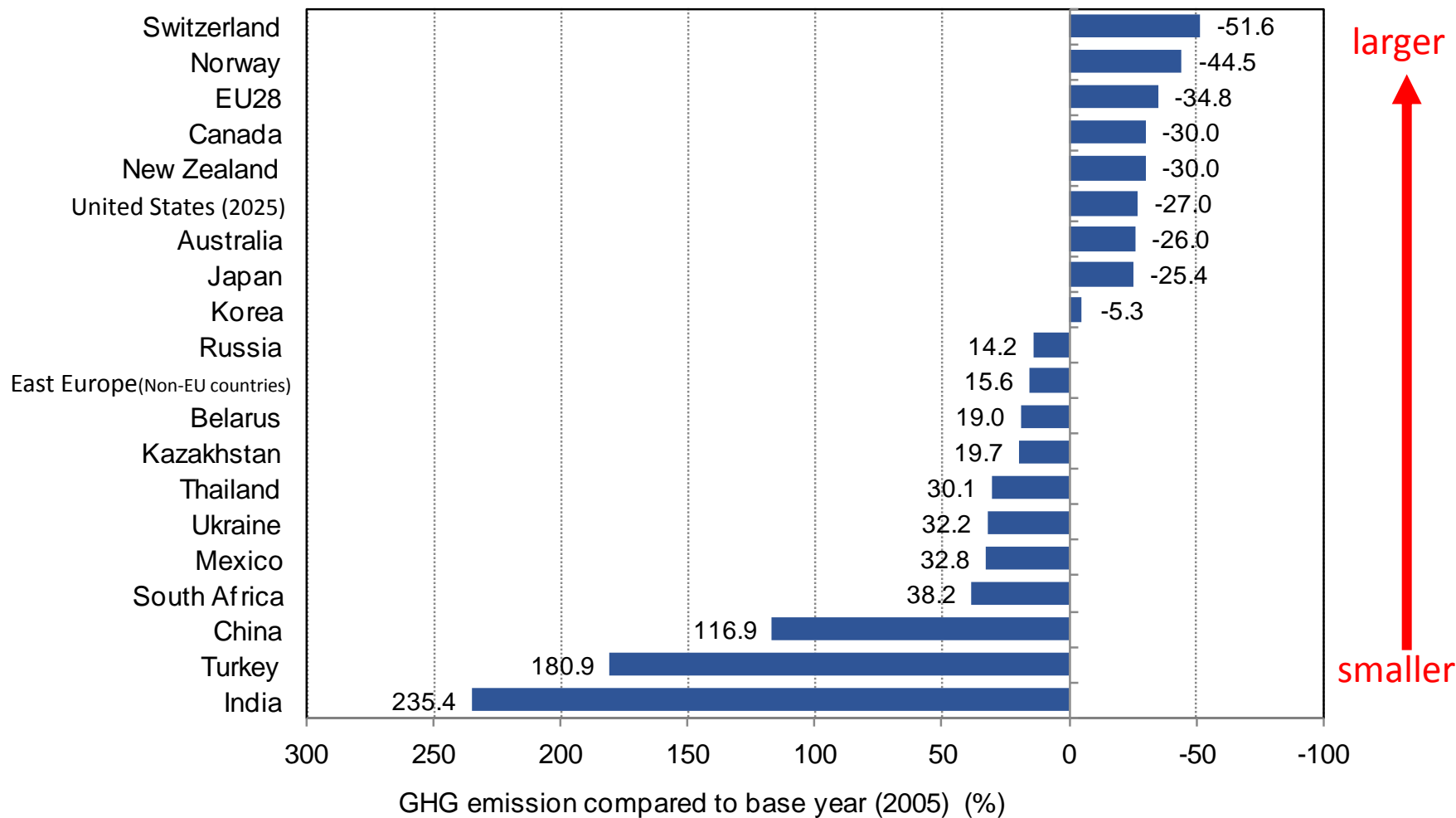
- IAMs with multiple regions, sectors, and technology options provide a capability to analyze a range of climate and energy policies:
 - Reference cases without additional climate policy
 - Consequences of policy changes
- IAMs are fundamental tools used in IPCC WG 3, by academics and by many nations to assess national and global climate policy
- Business and governments have supported IAM research and development efforts for decades, and exchanged information, e.g., on energy outlooks, technology options and representation of climate and energy policies
- IAM analyses have and will continue to play a fundamental role in ex ante and ex post analyses of (I)NDCs by governments, business, academia and think tanks

IAM analyses (RITE and collaborators)

- Supplied missing assumptions (as in conventional IAM studies)
- Assumed that each INDC was implemented domestically using an economy-wide GHG tax (theoretically the least cost option)
- Transformed all INDC results to a 2005 base year and outcomes in 2030
- Considered also GHG emissions pathways to 2030, 2050 and 2100 (constrained using a common global GHG tax) to consider outcomes for a range of warming through 2100

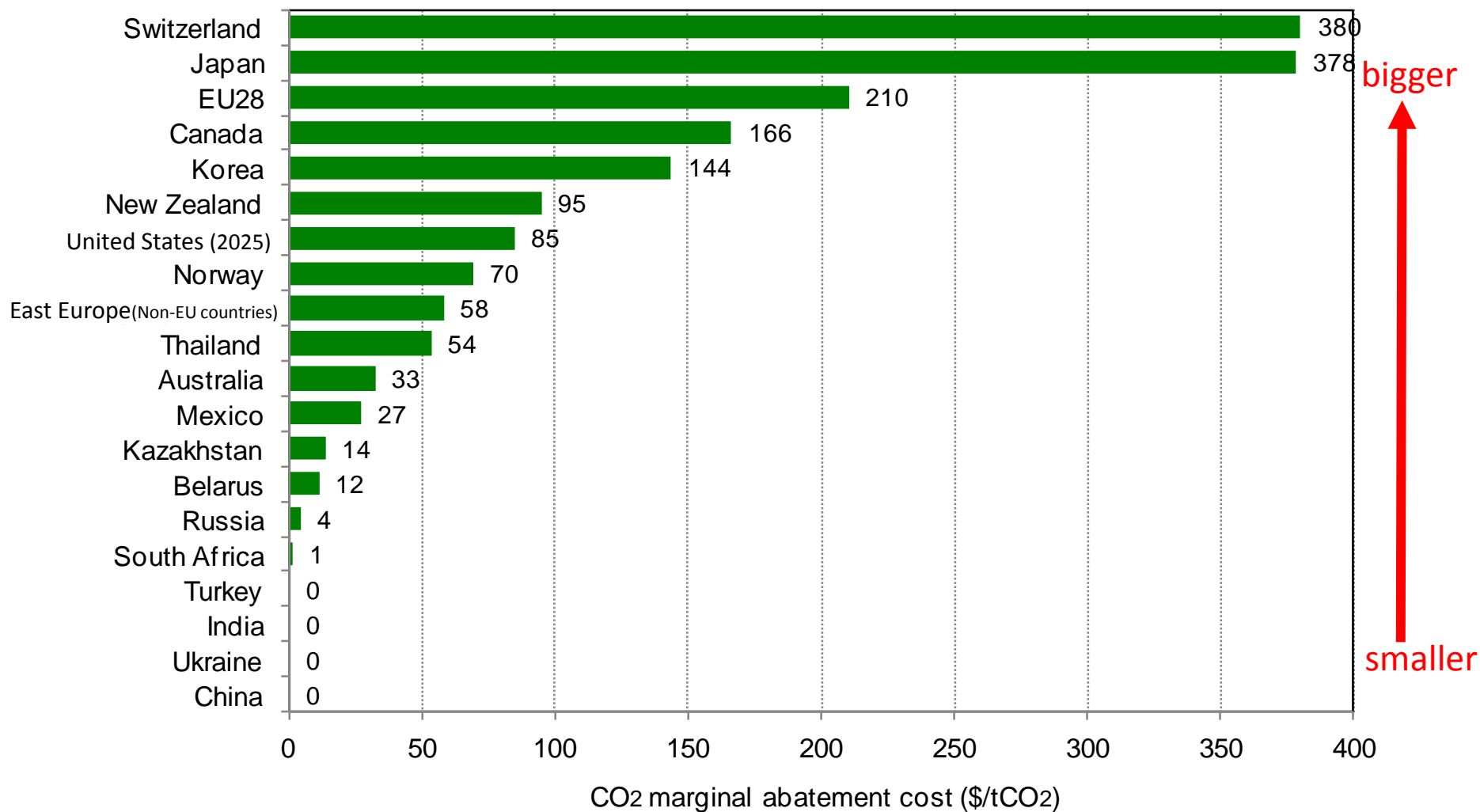
Next...sample results for domestic and global effects of INDCs as submitted ahead of COP 21 (RITE and collaborators in US and Europe) ...

Comparison of emission reduction ratios (in 2030 from a base year of 2005)



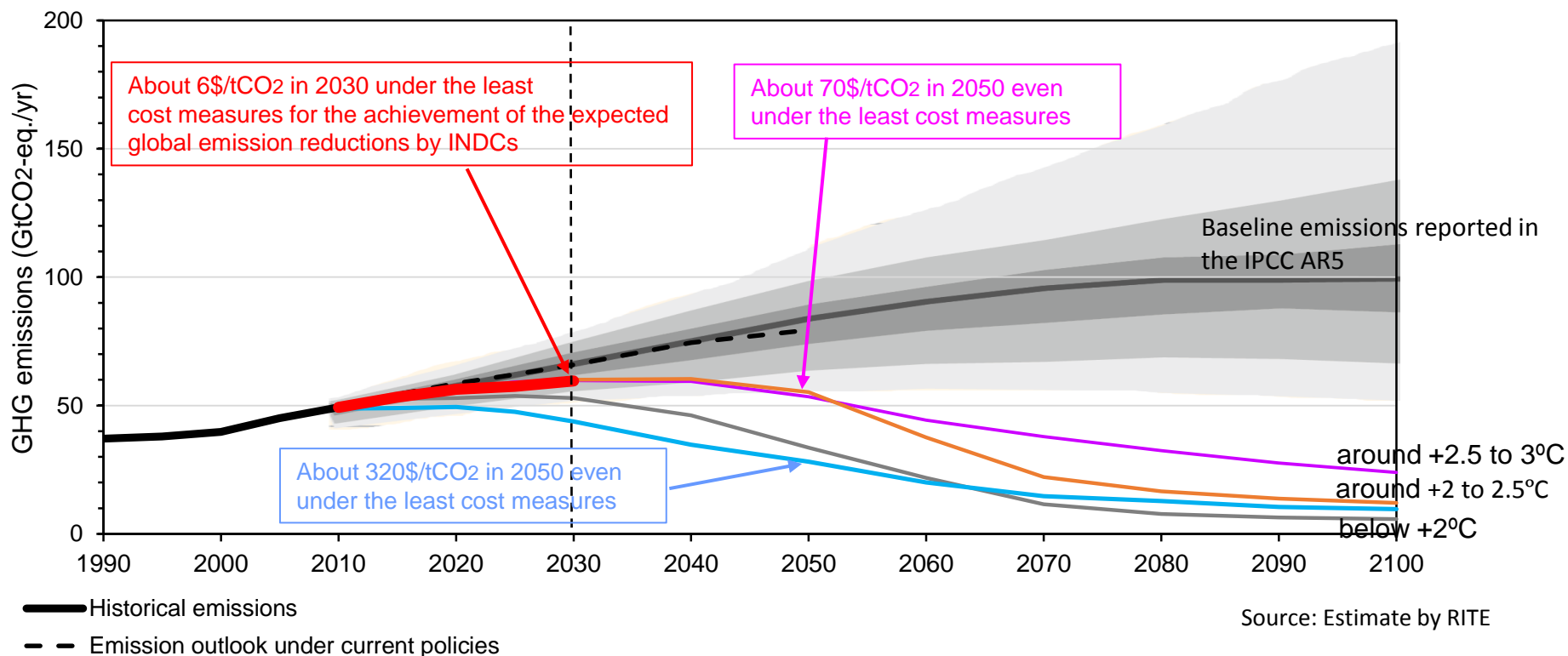
Model allows INDCs for all 20 regions to be compared on a common basis from 2005 to 2030

Comparison of CO₂ marginal abatement costs



INDCs were each implemented using an economy-wide, domestic GHG tax (theoretically the least-cost policy to achieve the pledge)

Global GHG emissions of the aggregated INDCs & illustrative emission pathways to 2100 toward 2 °C goal



— INDC submitted by October 1 (119 countries) assumed to be implemented

Climate policy in a mosaic world

- A world in which nations and regions establish bottom-up climate objectives and policies based on national circumstances and priorities
- Implementation depends on national policies and enforcement
- Economies and global GHG progress remain linked through, e.g.
 - Globalized supply and value chains
 - Trade and investment
 - Carbon leakage
 - **Formal bi- and multi-lateral linkages (in some cases)**
 - Research and development
 - ...
- Business will adjust to the global policy regime as implemented; it will affect planning, operations, employment, supply and value chains, trade and investment (grass roots, expansion and downsizing)

Business can make an important contribution to the assessment both of domestic (I)NDCs and the implications of the global portfolio

Thank You