Design of “1.5°-proof” mitigation policy instruments and NDCs

Side Event: Underpinning ambitious NDCs compatible with a 1.5°C emissions pathway and a resilient society

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Research Project

Transformative Raising of Ambition – The contribution of effective climate policy instruments to the 1,5°C target

SPONSORED BY THE

Federal Ministry of Education and Research

Project team: Perspectives Climate Research gGmbH and University of Freiburg, Chair of Forest and Environmental Policy

Project period: April 2017 – December 2018

Overall project goals: Peer-reviewed publications on how international climate policy instruments can increase mitigation ambitions towards the 1.5C target.

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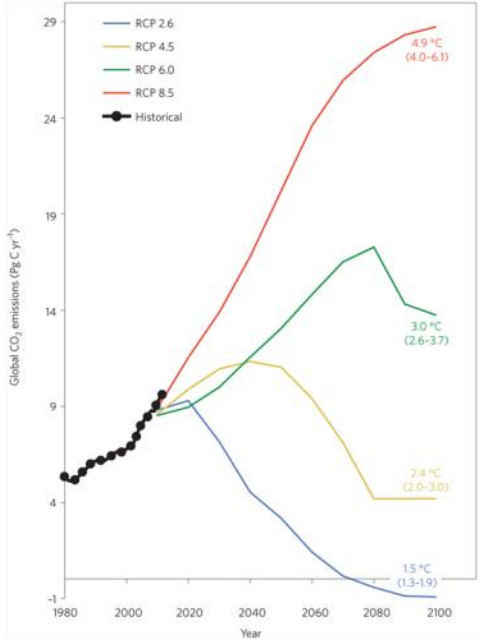
The challenging path towards 1.5°C

- **How can policymakers design, introduce and enforce policy instruments that transform entire economies in one generation?**



Source: Sandford, T., et al. (2014) The climate policy narrative for a dangerously warming world, Nature Climate Change, http://dx.doi.org/10.1038/nclimate2148

- **Maintain current growth rate of renewable electricity generation**
- **Fossil-free and near zero energy new buildings by 2020**
- **Emissions from forestry to decrease by 95% from 2010 levels by 2030**

→ policy instruments need to direct capital towards low-carbon infrastructures and assure early shutdown and dismantling of high carbon infrastructures

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Introducing 1.5°- compatible mitigation policies

- **Interest group constellations determine the success/failure of a policy instrument.**
  - constellations are temporary (example: feed-in-tariff)
  - "windows of opportunity" are short-lived
- **Policy instruments generate varying price signals depending on the strength of interest groups**
- **Redistribution is crucial!**

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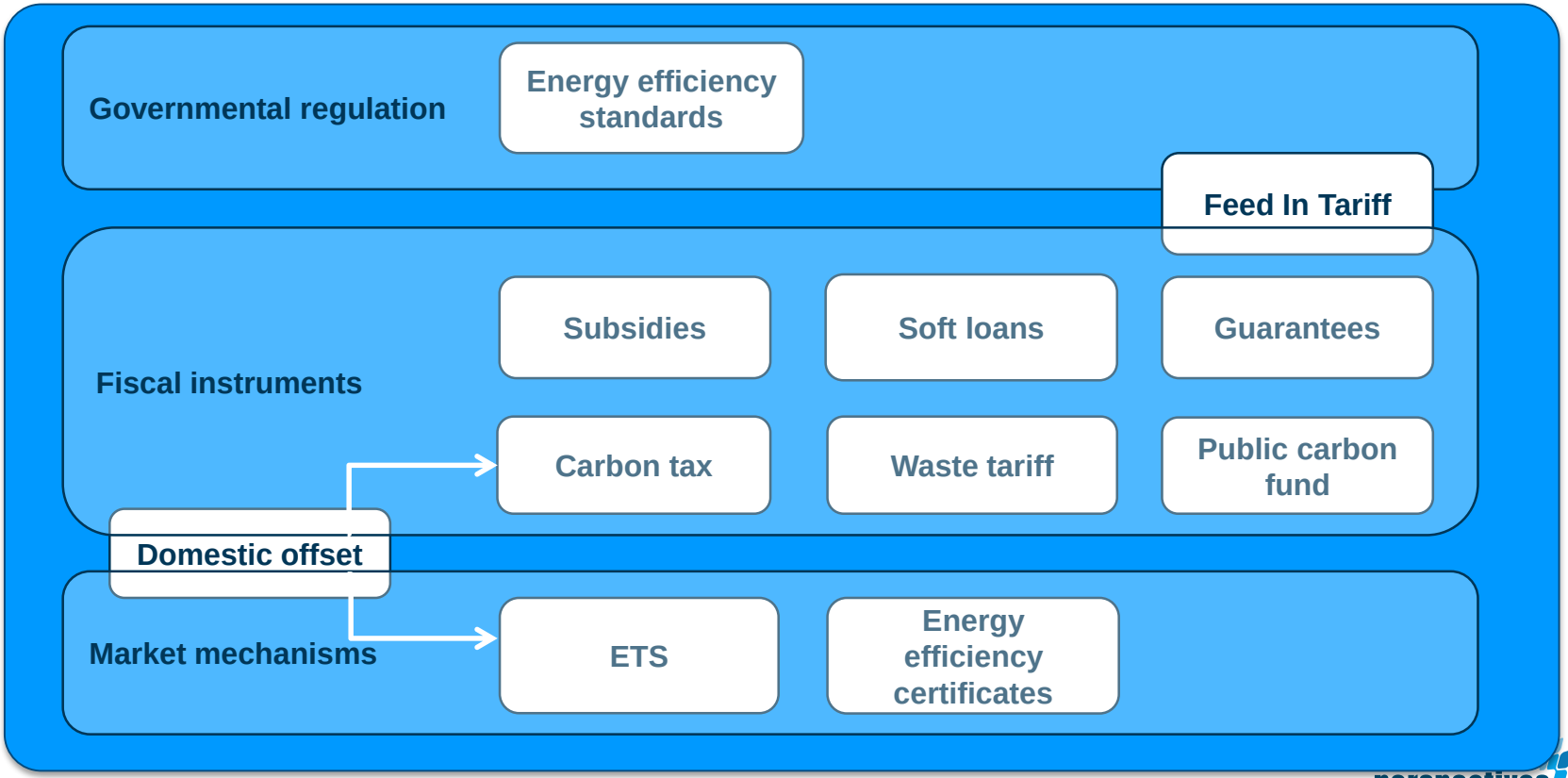
Sustainable Development Co-Benefits

- **Justification of mitigation policy instruments through their benefits in other policy fields**
  - SDGs as approach for classifying co-benefits
- **Environmental co-benefits: Mitigation of air pollution**
- **Economic co-benefits of carbon pricing policies e.g. through redistribution policies**

Framing of policy instruments for the 1.5° transition

- **Mitigation policy instruments can be framed as business opportunity, combining market mechanisms for mature technologies with public investment programmes for emerging technologies**
  - Will those efforts suffice to reach a 1.5°C path?
- **Alternative framing as a (global) societal emergency.**
  - Will there be a willingness to deal with impacts far from the respective national contexts?

Policy instruments that could underpin NDC implementation



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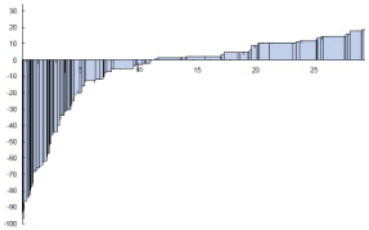
Key barriers for mitigation policy instruments



- Lacking belief in mitigation cost estimates
  - Policymakers see MAC curves as artifacts without real-life significance

- Effective opposition of emitter lobbies
  - Heavy industry lobbies are usually politically powerful, as they are strongly concentrated and contributed to past development of the country
  - As most low-cost measures are concentrated in heavy industries, a key chunk of abatement potential is lost

Key barriers for mitigation policy instruments II

- Focus on politically salient high cost measures
  - Low cost measures are often "boring" and do not relate to visible high technology
  - Policymakers like to deal with glitzy technology that can be unveiled in spectacular fashion
  - New lobbies emerge that thrive on subsidies

- Consumption growth overrides carbon intensity reductions
  - Even if measures are successful, increasing consumption will be a powerful counterforce

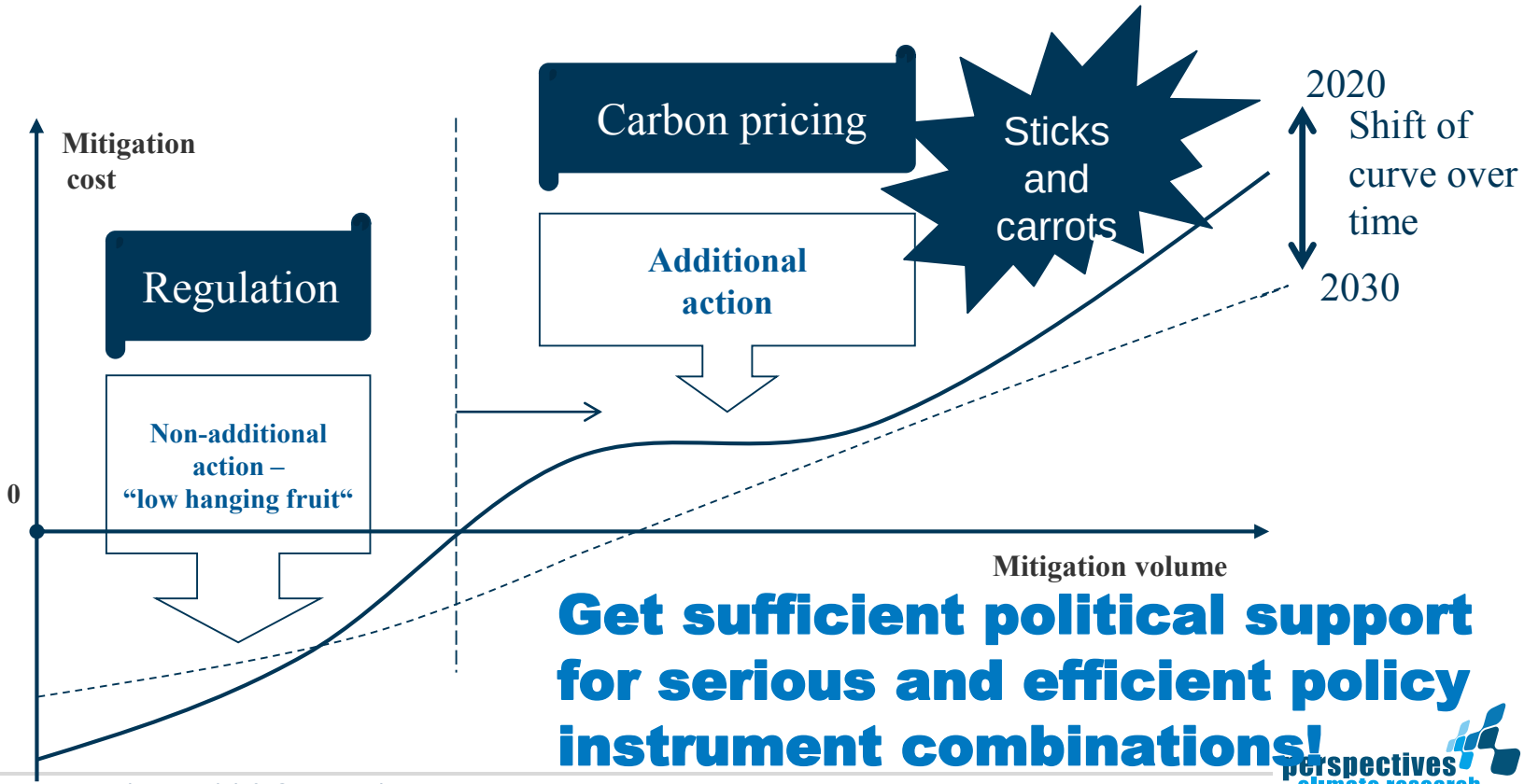
Successful introductions of policy instruments did…

- … use political windows of opportunity
  - Energy crisis allowed drastic energy efficiency measures (Brazil)

- … align powerful economic interests
  - Ethanol programme provided a new outlet for sugar industry (Brazil)
  - Wind power feed-in-tariff brought together farmers' and metal industry lobbies (Germany)

- … build on backing of key individuals
  - World's first bus rapid transit programme pushed by long-serving mayor of Curitiba (Brazil)

Recommendation for policy mix



Get sufficient political support for serious and efficient policy instrument combinations!

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Policy brief with summary messages

- **Application of the vast toolbox of regulatory and financial policy instruments requires robust political will**
- **Governments need to abandon fossil fuel subsidies immediately and introduce effective financial mechanisms like competitive auctions for renewable energy**
- **Forest landscape restoration requires multi-stakeholder collaboration**
- **Reaching the 1.5°C target requires large-scale carbon dioxide removal**

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Key questions for the side event

- How can the 1.5° imperative be "brought down" to the implementation level?
- How can effective mitigation policy instruments be introduced in the context of NDC implementation?
- How did Morocco achieve its frontrunner status in renewable energy?
- What are Moroccan approaches in the context of NDC revision?

Thank you!

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