

5th EU-US Transportation Research Symposium

Decarbonising transport for a sustainable future

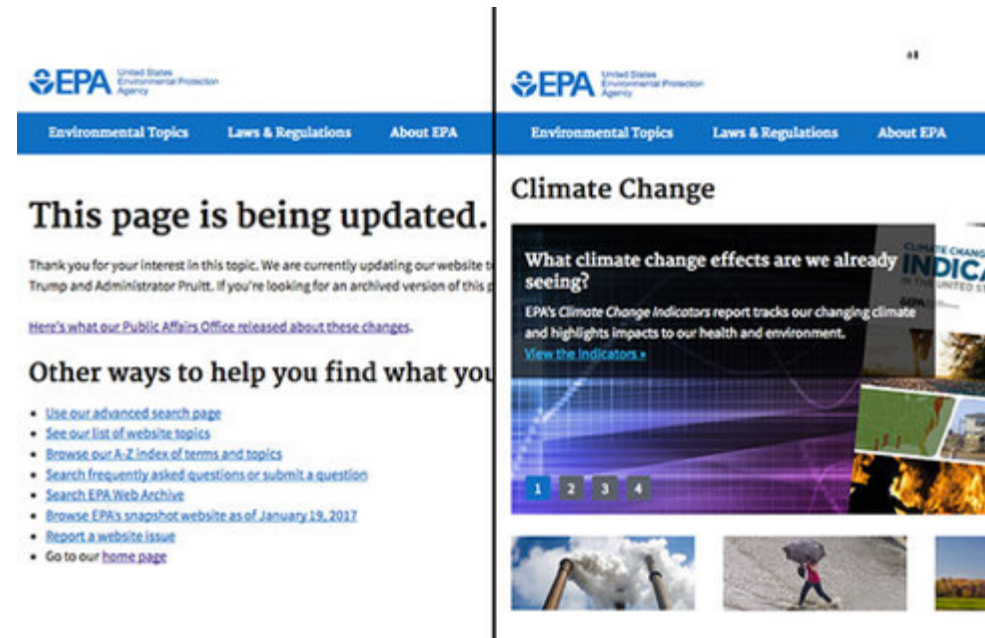
Co-benefits and coalitions

The influence of policy environment factors on climate change mitigation strategies in the transport sector

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Coalitions for the implementation of long-term climate change and mobility strategies

- Consensus required on the need for policy intervention and a strategic, coherent, and stable operating environment
- Strong political commitment to appear on the policy agenda and to remain in place as they rely on investments that are only cost-effective over the medium to long-term



Coalitions for the implementation of long-term climate change and mobility strategies

- Linking and packaging policies is vital to generate synergies and co-benefits between measures, including linking GHG reduction goals with other sustainable development goals
- An integrated policy approach that creates consensus and coalitions among diverse stakeholders and interests can help to overcome implementation barriers, minimize rebound effects, and motivate people, businesses, and communities



Greenhouse gas mitigation potential and co-benefits potential

Approach	Area of focus	Potential impact	Potential synergies
Avoid	Activity (reduction and management: short distances, compact cities and mixed use)	Potential to reduce energy consumption by 10 to 30% (TFL 2007; Marshall 2011)	Reduced travel times; improved air quality, public health, safety and more equitable access
Shift	Structure (shift to more energy efficient modes)	Potential for energy efficiency gains varies greatly, 10- 30% reductions (IEA 2012, Fulton et al. 2013)	Reduced urban congestion, more equitable access, improved freight reliability, reduced maintenance costs for road
Improve	Intensity (vehicle fuel efficiency)	Efficiency improvement of 40-60% by 2030 feasible at low or negative costs (IEA 2012; GEA 2012)	Improved energy security, productivity, and affordability
	Fuel (switch to electricity, hydrogen, CNG, biofuels and other fuels)	Changing the structure of the energy consumption. Mitigation and efficiency potential uncertain.	Diversification of transport fuels contributes to climate, air quality, and/or energy security objectives

Governance factors of success for sustainable development and climate change policies

- Political continuity and a societal consensus, which enable the take-up of policies and ensure stability,
- An integrated policy approach that combines various measures to provide a basis for political coalitions, and
- Political continuity and policy integrations efforts are affected by the institutional context and the policy operating environment.



Elements of a multi-modal, multi-level sustainable transport package

Examples measures	Complementarity of measures
<p>National measures</p> <p>Fuel tax</p> <p>Vehicle fuel efficiency regulation</p> <p>Vehicle tax based on fuel efficiency and/or CO2 emissions</p>	<p>Vehicles standards and regulations ensure the supply of efficient vehicles and taxation helps steering the consumer behaviour</p> <p>Fuel tax encourages more efficient use of vehicles, which helps minimising rebound effects that might occur if individuals and businesses drive more or not as efficient as they would have driving a vehicles with lower efficiency standards</p>
<p>Local and state measures</p> <p>Compact city design and integrated planning</p> <p>Provision of public transport, walking and cycling infrastructure and services</p> <p>Road User Charging, parking pricing, access restrictions, registration restrictions and number plate auctions, eco-driving schemes, urban logistics</p>	<p>Compact and policy-centric planning enable short trips and the provision of modal alternatives provides affordable access</p> <p>Complementary measures at the local and/or state level help manage travel demand and can generate funds that can be re-distributed to support low-carbon transport modes</p>

- Interactions between different levels of government consensus on climate change policy, may vary between key political and societal actors
- Shared methods and values can help mitigating political volatility
- Epistemic communities can play an important role to generate consensus on major policy issues



- Combination of policy interventions can create the basis for coalitions for long-term climate action strategies
- Synergies between socio-economic and political objectives can affect the ability to overcome opposition
- Involvement of potential veto players and the incorporation of their policy objectives



Concerted

Limited mitigation action (2.5 – 3 °C)

- ▷ Comprehensive and ambitious policy agenda
- ▷ Minimal majority coalitions for **(sometimes bold) specific actions**
- ▷ Based on **political support** from progressive parties

Towards decarbonisation (1.5 – 2 °C)

- ▷ **Integrated** policies, incl. local and national level measures
- ▷ Implemented by a multilevel, multi-actor **coalition**
- ▷ Based on a broad **consensus**

Governance

Minimal majority

Multi actor coalition

Some efficiency gains but very little mitigation (3.5 – 6 °C)

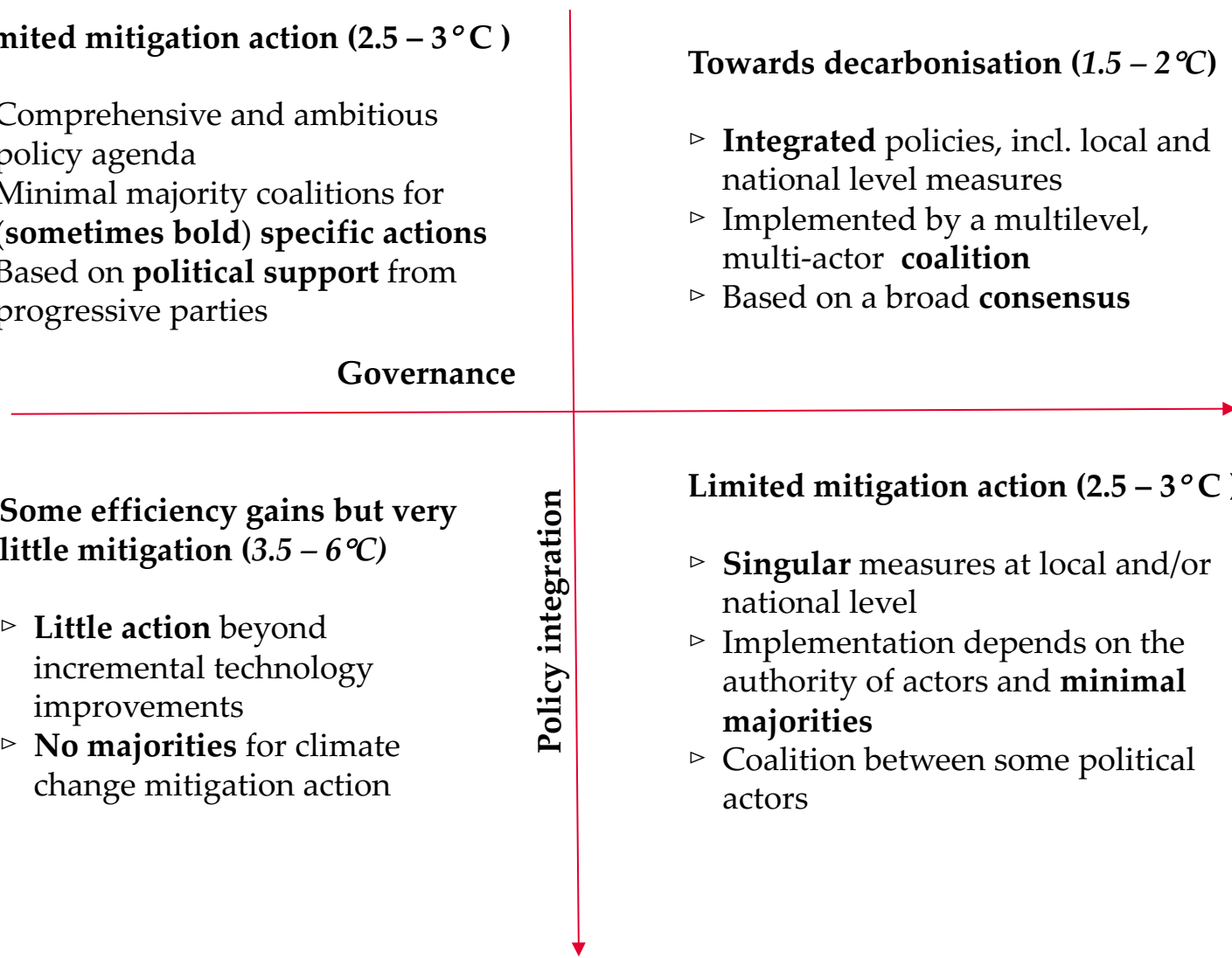
- ▷ **Little action** beyond incremental technology improvements
- ▷ **No majorities** for climate change mitigation action

Limited mitigation action (2.5 – 3 °C)

- ▷ **Singular** measures at local and/or national level
- ▷ Implementation depends on the authority of actors and **minimal majorities**
- ▷ Coalition between some political actors

Policy integration

Fragmented



Making Utopia possible

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