



# Assessing the role and impact of a carbon price

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**PMIF Global Knowledge Forum**

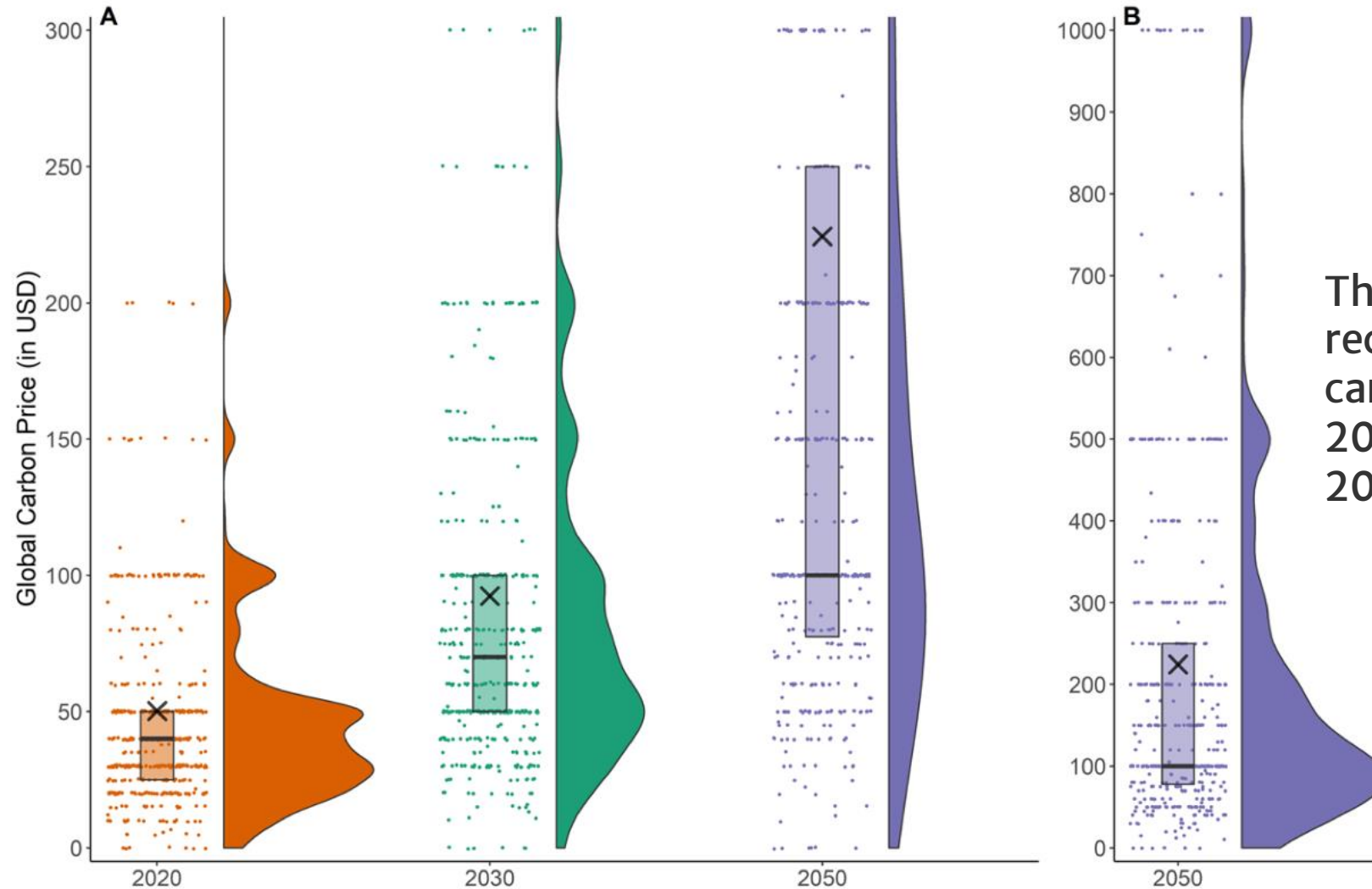
**21-22 May 2023, Bilbao, Spain**

# Climate change and carbon pricing

- To avoid the most damaging effects of climate change, global average temperature must be limited to 1.5°C above preindustrial levels.
- A gap remains between current policy ambition and the ambition required to meet the goals of the Paris Agreement.
- While meeting the 1.5°C or net-zero emission targets entails economic costs, the overall costs would be lower than the costs of climate change if those targets are not met
- Carbon pricing is the single most cost-effective policy tool that governments and companies can use as part of their broader climate strategy

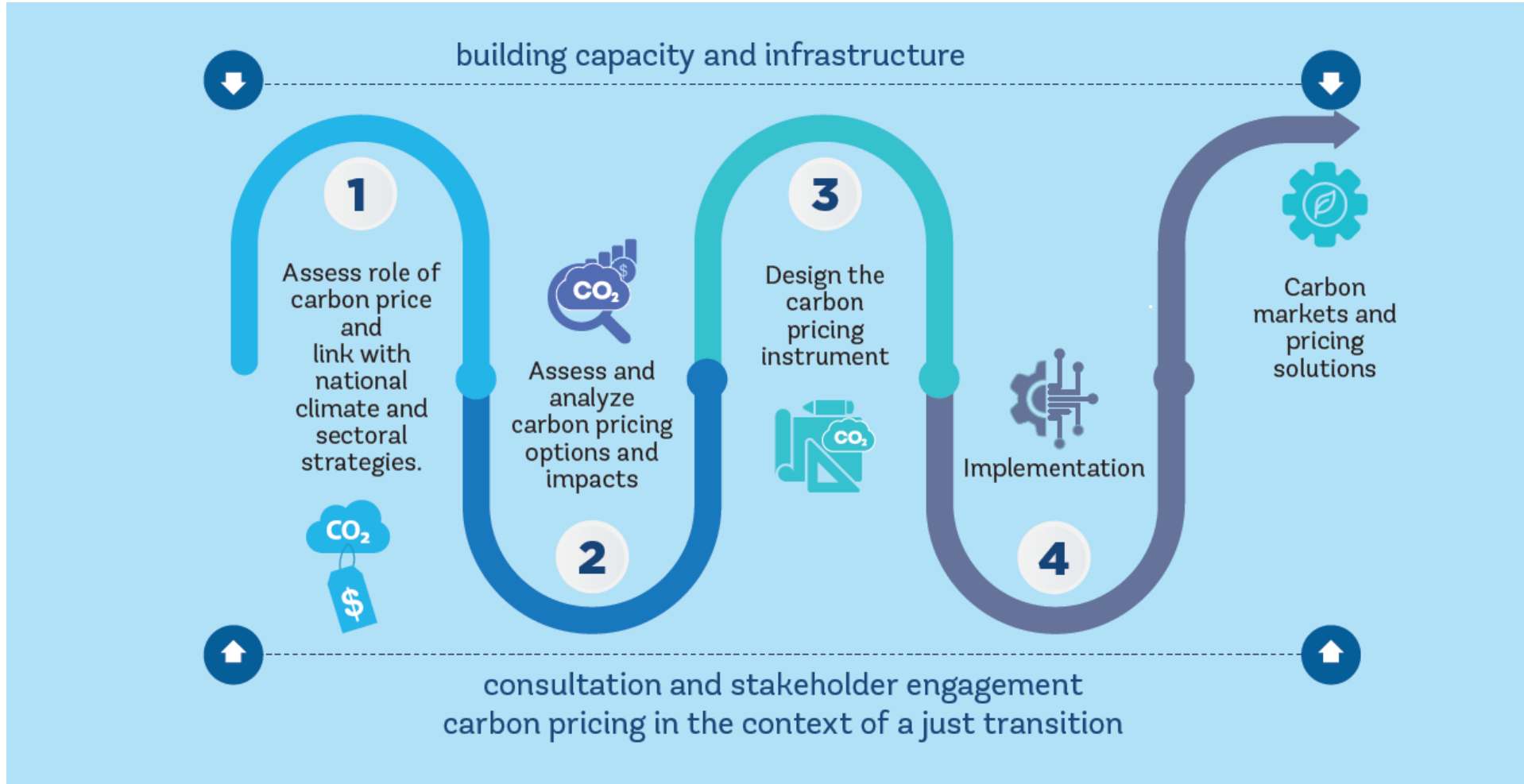


# Which carbon price would you recommend to your governments in 2030, 2050?

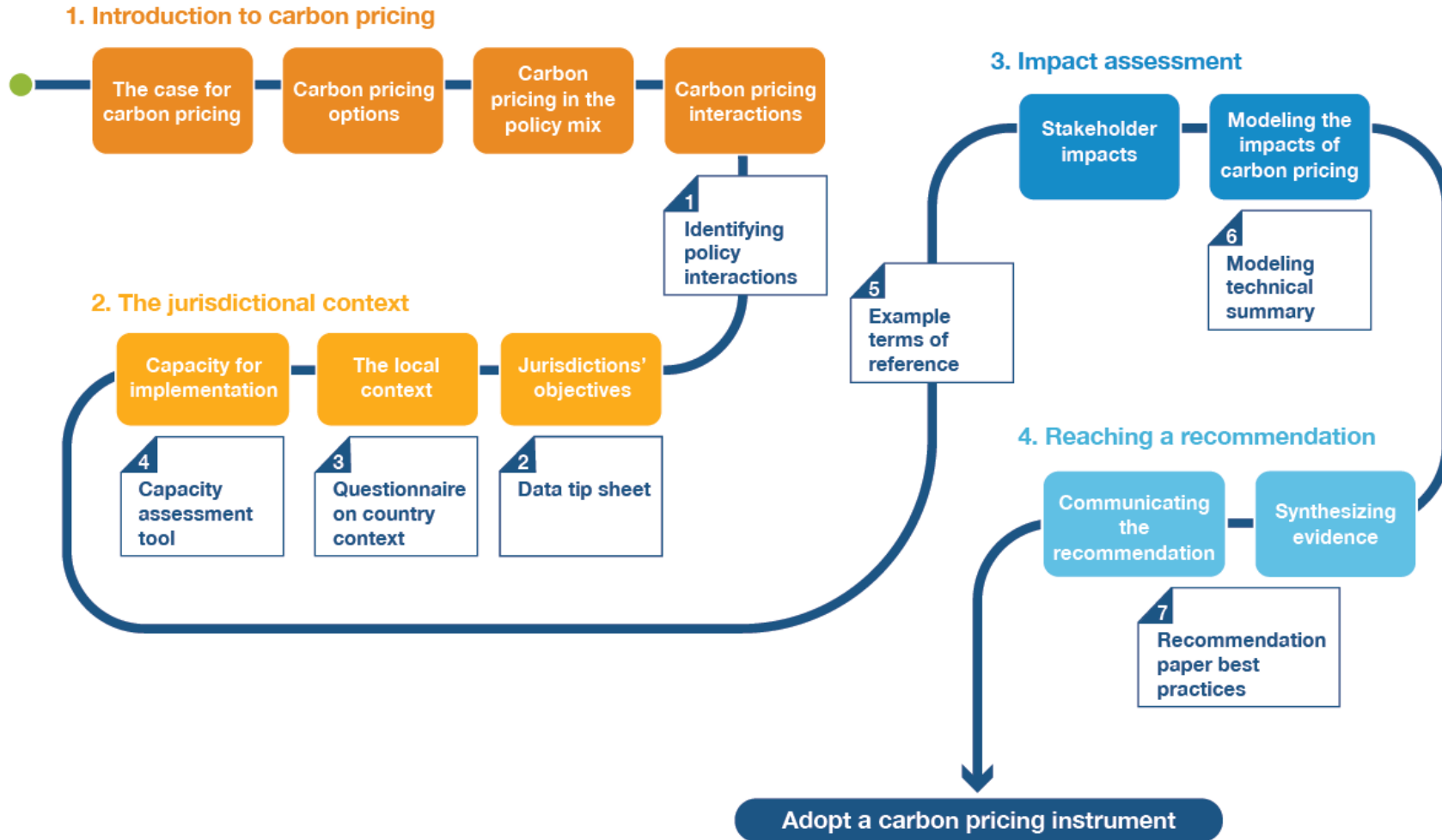


The average recommended carbon tax is \$92 in 2030 and \$224 in 2050

# Carbon pricing policy development roadmap



# Carbon pricing policy assessment roadmap



# Policy objectives influence instrument choice

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## ETS advantages

Emission outcome certainty

Regional/international cooperation

## Carbon tax advantages

Cost-effective mitigation

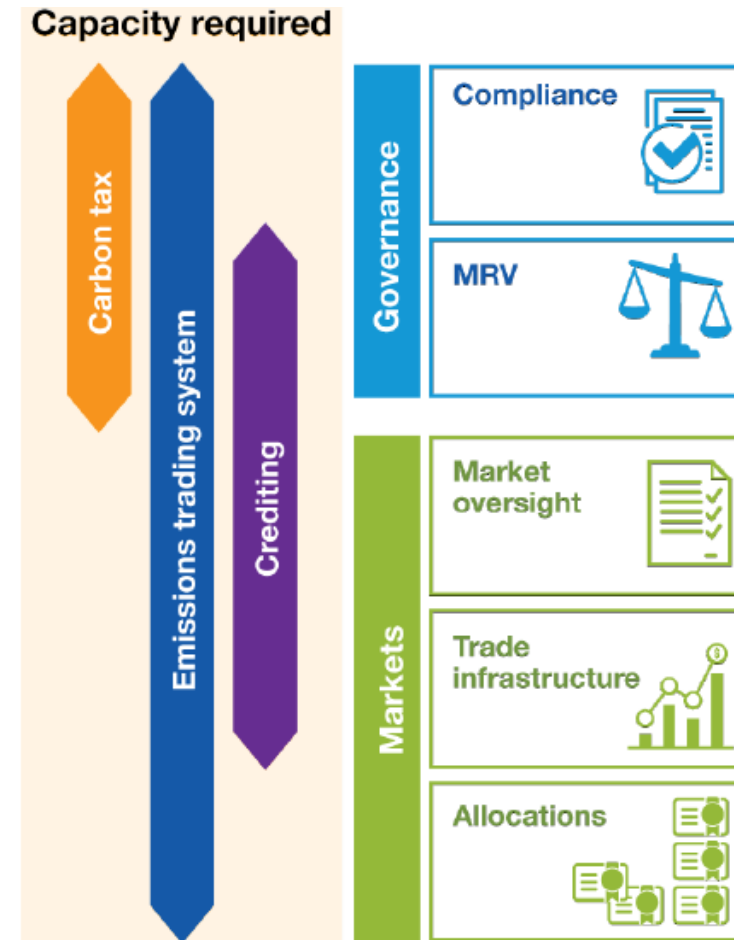
Local benefits

Promotes business investment certainty

Raises predictable revenue



# Local context and capacity is important



# Interactions with other policies affects how a carbon price functions

## Complementary

improve  
functioning of  
carbon markets

- energy market reform (e.g. facilitating cost pass-through)
- infrastructure upgrades
- energy efficiency labeling
- pollution/emissions measurement

## Overlapping

duplicate  
incentives in  
carbon markets

- feed in tariffs
- green certificate programs, such as renewable energy targets

## Countervailing

oppose  
incentives in  
carbon markets

- fossil fuel subsidies
- industry tax breaks and special treatment





# Which climate policy instrument is superior...?

Policy instrument		Assessment criteria						
		Short-term minimisation of abatement costs	Long-term minimisation of abatement costs	Administrative costs	Ability to deal with uncertainty	Reallocation and distributional concerns	Political economy and public acceptability	Fiscal impact: revenues and expenditures
Emission- pricing instruments	Greenhouse gases tax	Highest	High	Moderate to high	High	Moderate	Low	Rev. raising
	Emission trading schemes (ETS)	Highest	High	High	Moderate	Moderate	Low to moderate	Rev. raising (when auctioning permits)
	Non-tradable performance standards	Moderate	Moderate	Low	Low	Low	High	Neutral
Standards and regulations	Subsidies to abatement	High	Moderate	High	High	moderate to High	High	Expenditure
	Feebates (e.g. feebates on vehicles)	Fairly high (often higher than non-tradable performance standards)	Moderate	Low to moderate	High	Low to moderate	Fairly high (higher than performance standards)	Neutral (can be revenue or expenditure)
	Technology standards	Low	Low	Low	Low	High	High	Neutral

Source <https://voxeu.org/article/framework-decarbonise-economy>



# Assess impacts using multiple sources

## Impact assessment options



### Business

Modeling



Trade metrics



Stakeholder engagement



### Households

Modeling



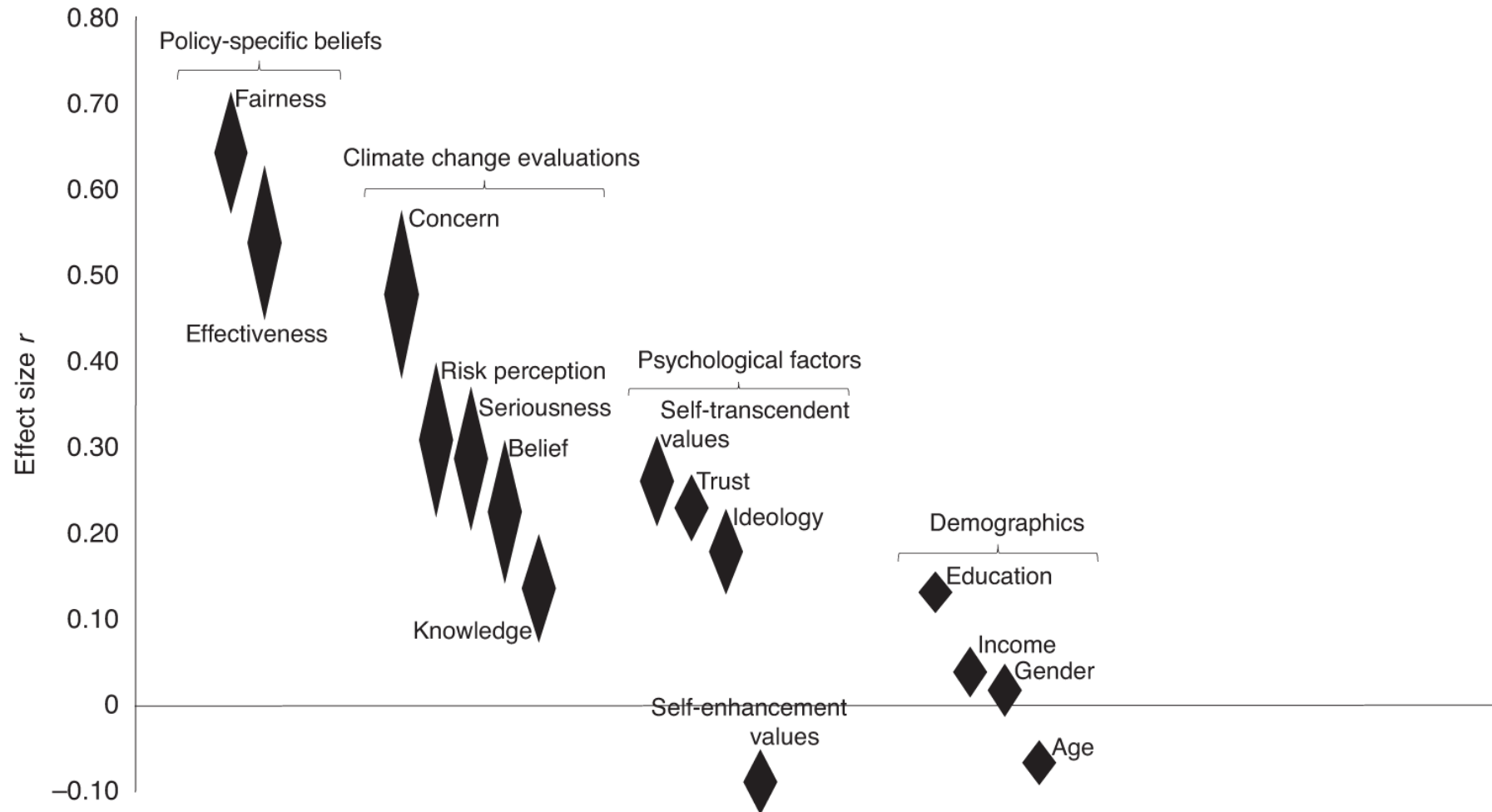
Market analysis



Household surveys

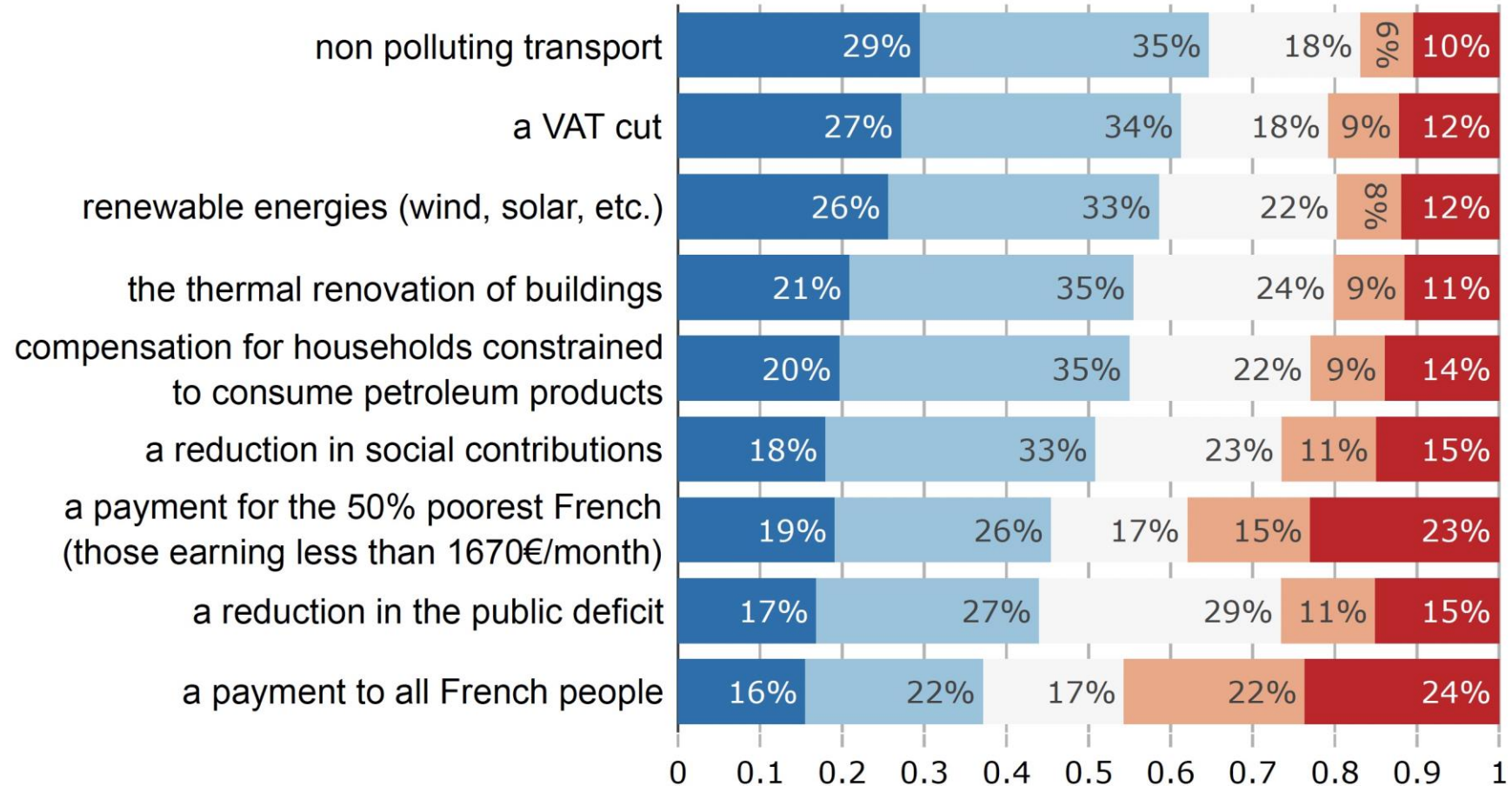


# Visual summary of the relationship between determinants and public opinion about climate change taxes and laws



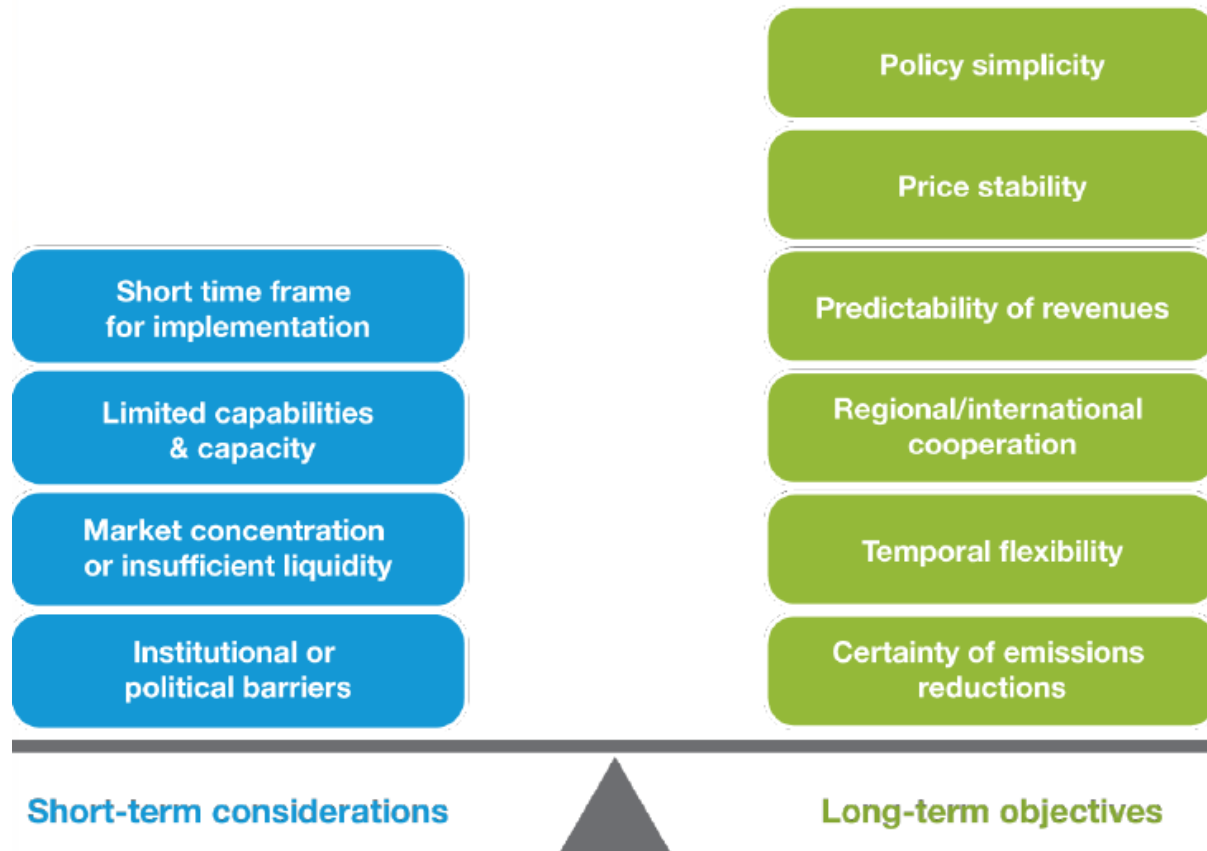
# Would you approve of an increase of the carbon tax if the revenues were used to...?

■ Yes, completely   
 ■ Rather yes   
 ■ Indifferent/PNR   
 ■ Not really   
 ■ Not at all



Source: <https://voxeu.org/article/public-support-carbon-taxation>

# Making recommendations



-  Justify the need for intervention
-  Respond to stakeholder impacts
-  Use broad evidence for support

## Summary

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- Carbon prices are needed to incorporate climate change costs into economic decision making
- Carbon pricing should be included as part of a broader arsenal of tools to achieve domestic climate targets, but it is not a silver bullet
- Choice of carbon pricing instrument depends on the policy objectives and national circumstances
- The most successful instrument will be the one that can be enduring.
- Countries are increasingly adopting carbon pricing, but current levels remain inconsistent with national and international climate objectives
- Successful carbon pricing reforms require integrating many stakeholders' considerations and increasing the capacity of governments and domestic businesses





# Tools and guidance available

## Summary of tools

1. Policy interaction attachment
2. Jurisdiction context questionnaire
- 3 Data tip sheet
4. Capacity assessment tool
5. Modeling technical summary
6. Example terms of reference
7. Recommendation paper structure



- Climate policies assessment tool (CPAT)
- MAAP-CPI tool



Thank you