

# Overarching questions

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2. How do we translate information across communities (e.g. from impact models to integrated assessment to social cost of carbon models)?
3. How do we address catastrophic impacts and extreme events?
4. What is the right scale for impacts assessment? And how do we link across scales?
5. How do we develop models that are useful for adaptation decisions?

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# Two illustrative uses for climate impacts information

	Scale	Metrics	End use	Models
Social cost of carbon	Global	Economic	Rulemaking process	Reduced-form IAMs
Climate preparedness and resilience	Local to regional	Largely physical	Energy system planning	Sector-specific

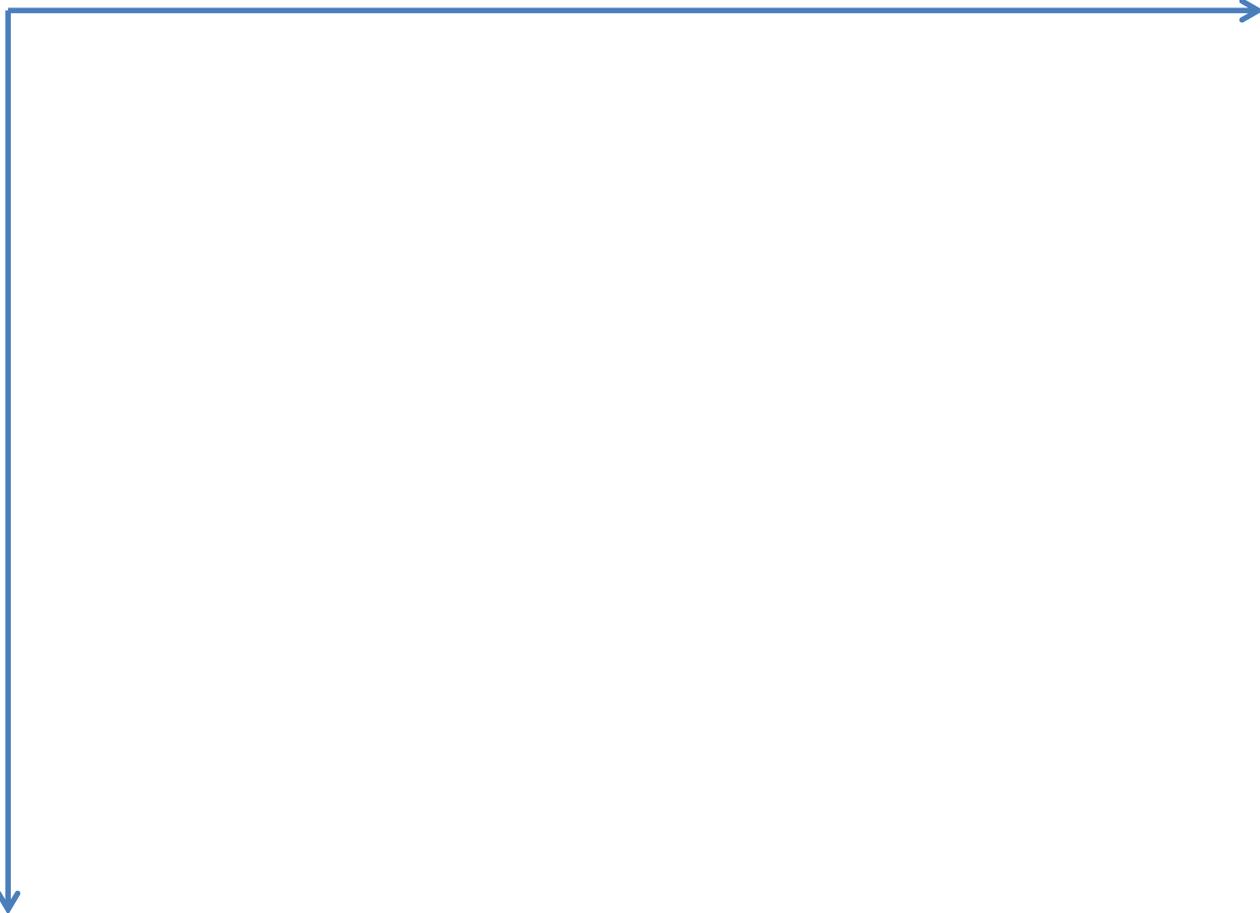
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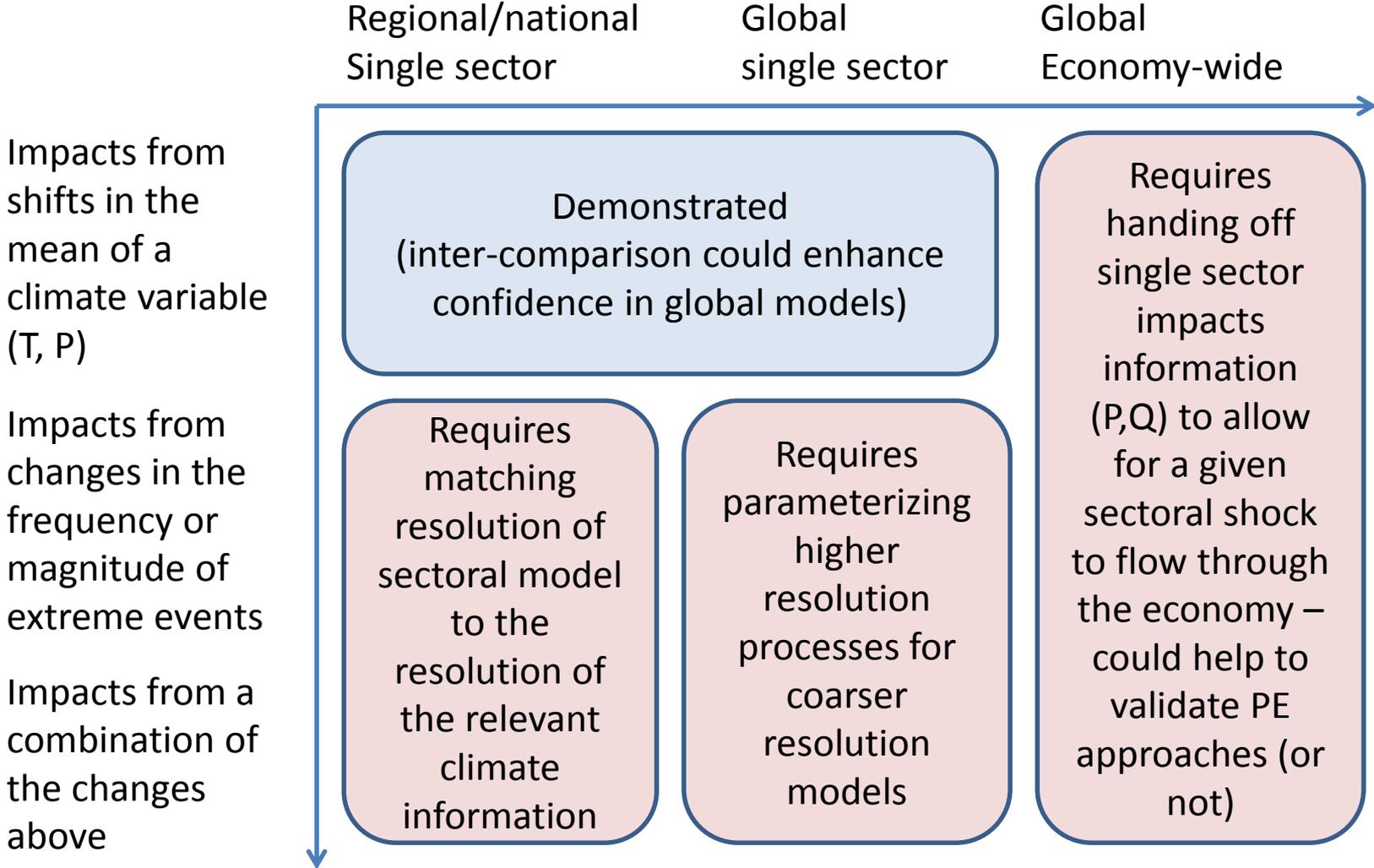
Conclusion: The appropriate scale strongly depends on the application

# Expanding in two dimensions

Regional/national  
Single sector      Global  
single sector      Global  
Economy-wide



# Expanding in two dimensions



## Two insights

- There is no right answer to the “scale question” – the questions being posed by the user community span multiple scales, albeit for different purposes (but exercises conducted for different purposes can still benefit one another)
- In the simplest cases, solutions to the “translation problem” have been demonstrated – these should be encouraged and replicated where possible (but more challenging cases lie ahead)

# Remaining questions related to translation / extreme events

1. At the sub-global level, are there information barriers or computational limits to incorporating extreme events?
2. How large are the interaction terms when specific impacts are layered?
3. How do we move from local/regional to national/global scales when relevant detail will be shed? Would it be possible to develop some rules of parameterization?
4. Can CGE approaches validate PE results or provide information about bias?
5. Can empirical approaches validate process models or can they provide top-down bounds on aggregated bottom-up information?