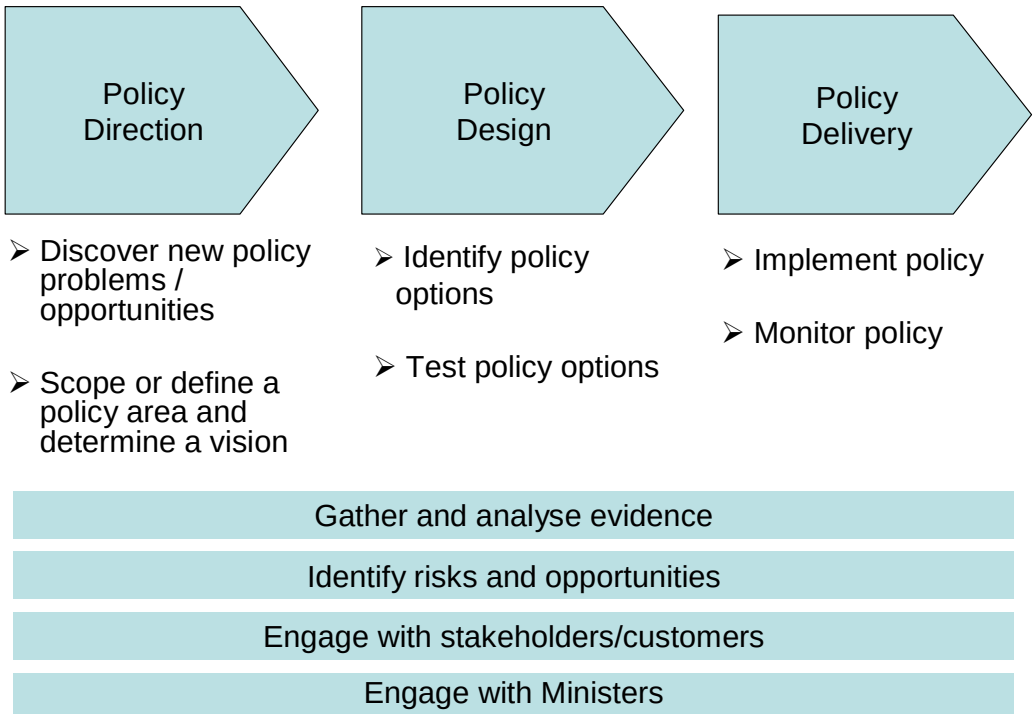
Guidance on the use of strategic futures analysis for policy development in government

This short guidance document outlines how particular futures techniques can be used for particular parts of policy development. It is based on a detailed analysis that is available as a separate document.[1] It builds on the guidance provided in the Foresight Horizon Scanning Centre (HSC) toolkit which should be referred to for thorough guidance on the use of techniques.[2]

1 Processes involved in policy development

The diagram below illustrates some processes involved in policy making. This description draws on policy guidance from across UK government departments and highlights those processes that can most benefit from futures work. We consider gathering and analysing evidence, identifying risks, and engaging with stakeholders and Ministers to occur throughout the other processes. We use this framework for policy development to structure this guidance.

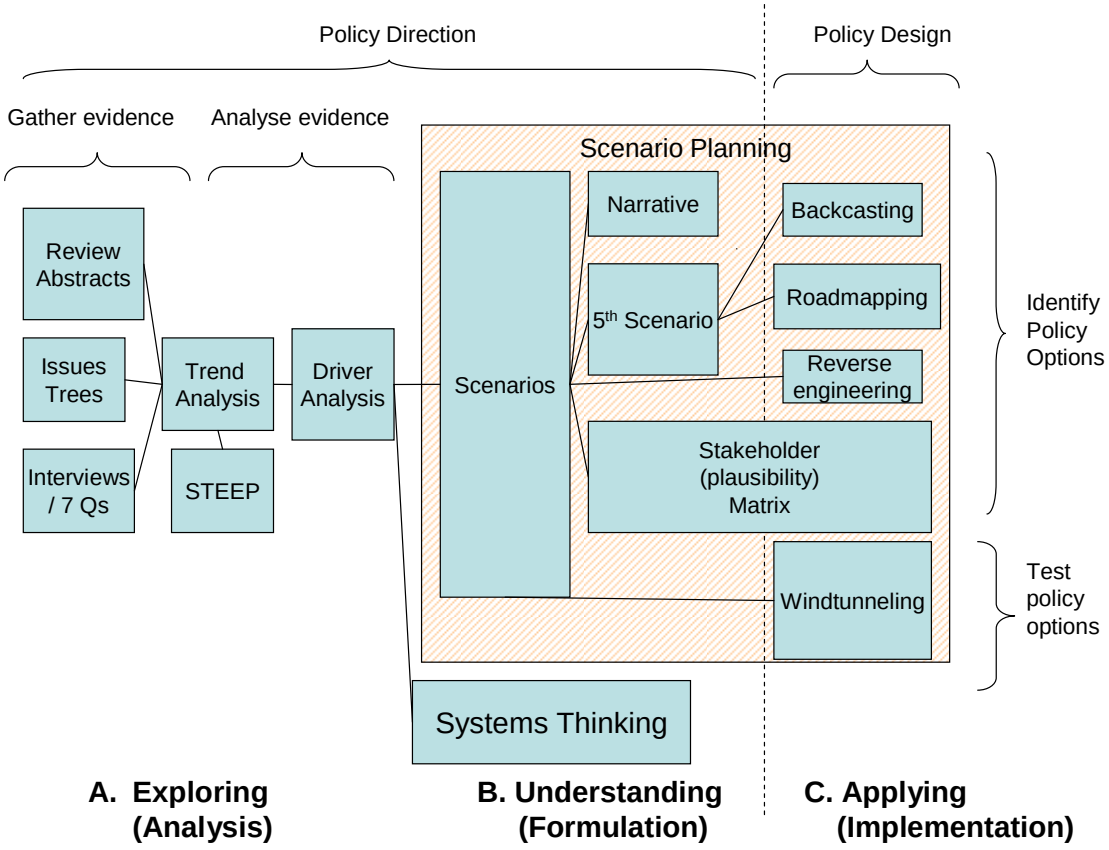


2 The contribution of futures techniques to policy development

A detailed description of techniques used for work in government is given in the toolkit produced by the HSC, *Exploring the future: Tools for strategic thinking*[2] . The toolkit also provides many case examples of how these techniques have been used

[1] Available on request from the Foresight Horizon Scanning Centre.
[2] Available at http://www.foresight.gov.uk/toolkit

in policy making in government. The diagram below builds on this, and on a series of discussions held with those involved in futures work in a policy environment, to illustrate where futures techniques contribute to the policy processes introduced above. The figure also illustrates connections between the various techniques in terms of how they can be used together. These combinations are illustrated in more detail in "tracks" identified later in the document[3]. We also group techniques into those used for "Exploring"; "Understanding" and "Applying"[4]. The contribution of individual techniques to particular policy processes is mapped in detail in tables in the following section. In the tables underneath the tracks in Section 4, we provide details of *how* each futures technique adds value to particular policy processes. Those tables also provide some tips to overcome some of the possible difficulties that may affect confidence in use of these techniques.



[3] This indicates some possible combinations of techniques: other combinations are possible. It is also not necessary to use all connected techniques; and some can be bypassed for particular projects (for example using already existing scenarios to test policy options using "windtunneling").

[4] These groups relate closely to the "phases of strategy" as used in the HSC toolkit which are "Analysis"; "Formulation" and "Implementation". Those terms are not used here in order to avoid confusion with similarly named policy processes.

3 *Map of futures techniques that contribute to policy processes*

The contribution of individual techniques to particular policy processes is mapped in detail in the following tables.

Policy Direction		Policy Design		Policy Delivery
Discover policy problems / opportunities	**Define policy area and vision of the future**	**Identify policy options**	**Test policy Options**	**Monitor Policy**
Review Abstracts	STEEP	Roadmapping	Windtunneling	Indicators and Warnings
Trend Analysis	Trend Analysis	Backcasting	Stakeholder / Plausibility matrix	Lead diagnostic indicators
	Driver Analysis	Reverse Engineering		
	Scenarios			
	Narrative			
	Visioning/ 5th Scenario			
	Stakeholder / Plausibility matrix[5]			
	Backcasting/ Roadmapping[6]			

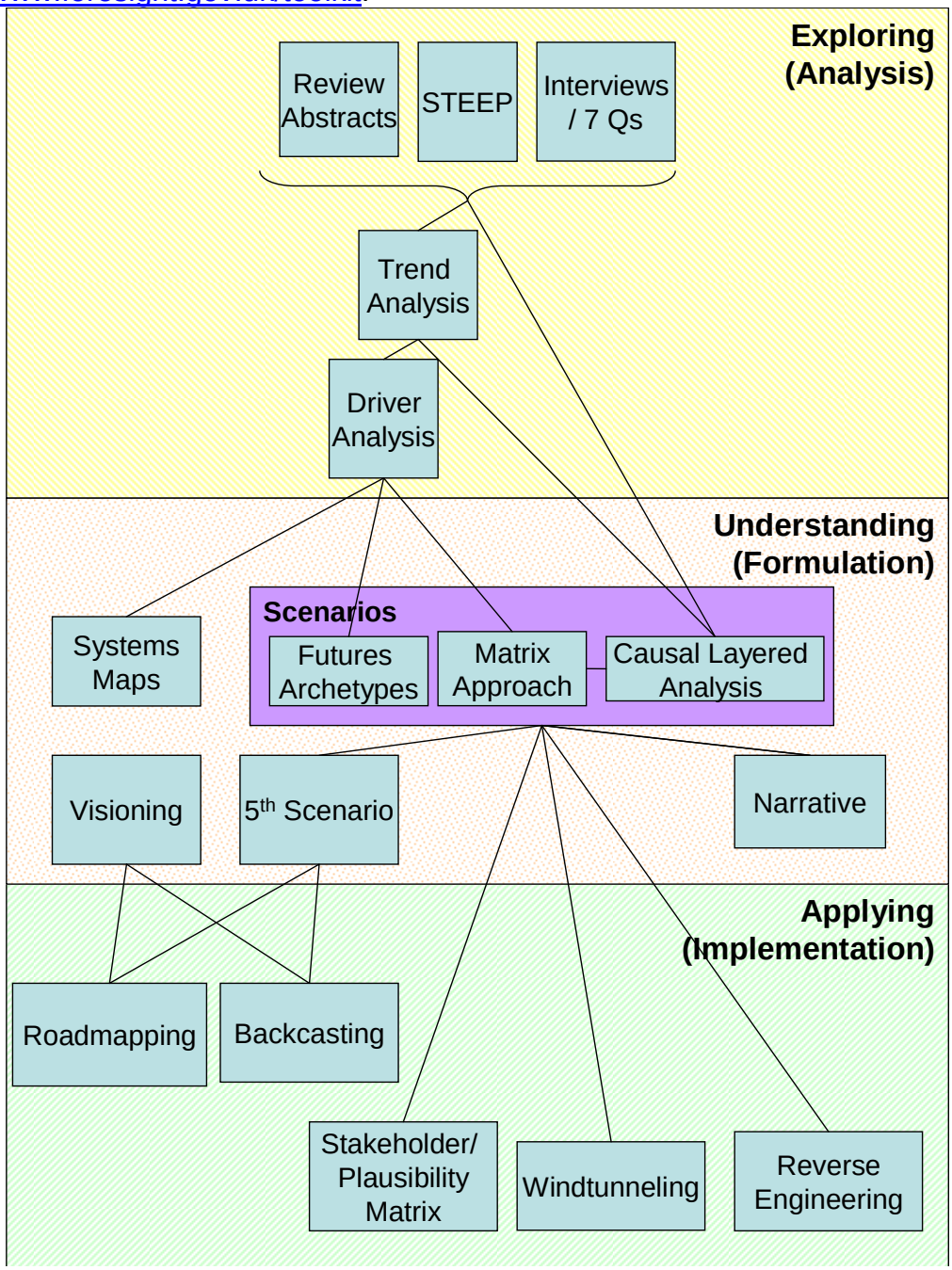
Gather evidence	Analyse evidence	Identify risks and opportunities	Engage with stakeholders	Engage with ministers
Review Abstracts	Driver Analysis	Scenarios	Scenarios	5th Scenario
Seven Questions	Trend Analysis	Driver Analysis	5th Scenario	Visioning
STEEP	STEEP	Backcasting	Visioning	Narrative
		Reverse Engineering	Reverse Engineering	
			Backcasting	
			Roadmapping	
			Seven Questions	

[5] The plausibility matrix technique described in the HSC toolkit asks questions around both plausibility and desirability for different groups. This technique here refers to a similar matrix approach used to reveal stakeholder perspectives.

[6] While the outputs of these techniques contribute mainly to later stages of the policy process, use at this stage can help refine visions.

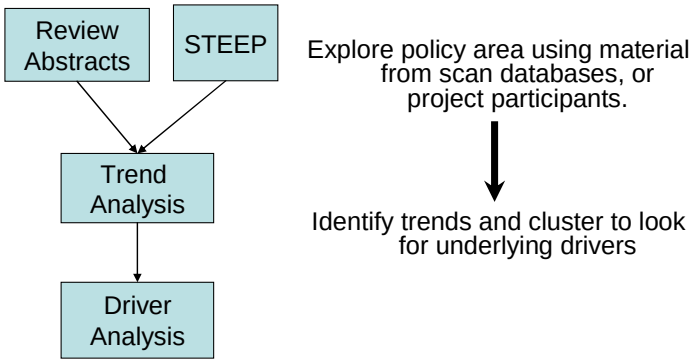
4 Tracks of technique usage

The diagram below shows, in more detail, how some of the futures techniques described here can be used together. This indicates some possible combinations of techniques that have been used in government and other combinations may be possible. From this we determine, on the following pages, “tracks” of techniques that can be used together for a particular policy need. Brief descriptions in the use of techniques are provided, but for detailed guidance please see the HSC toolkit at http://www.foresight.gov.uk/toolkit.



Scoping underlying causes

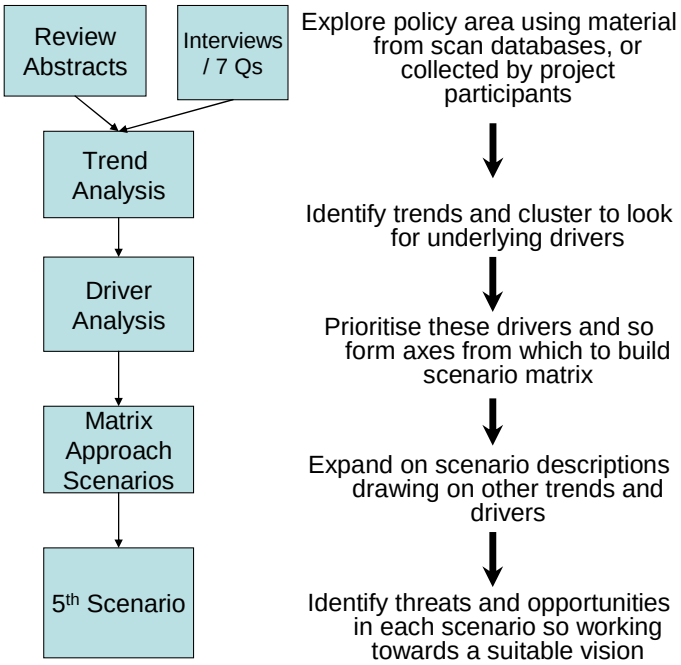
Exploring underlying issues causes in scoping or defining the policy area



Techniques	Benefit	Possible issues and mitigation
Review Abstracts	**Expand Horizons** The collection of abstracts from diverse sources allows identification of weak signals and emerging trends. **Make Sense / Structure Process** Context provided (likelihood, impact, time horizon etc.) around diverse articles allows for further analysis	➢ Drivers that are not prioritised should be kept and revisited later in the process. ➢ Devote time to identifying gaps to ensure drivers cover policy area. ➢ Use alternative categories to STEEP where appropriate or categorise the same issues in multiple ways. ➢ Risk of confusing if broad material on trends is not accompanied by some activity to identify a way forward. So follow with an "Understanding" technique such as scenarios. ➢ Ensure broad participation in workshops to introduce fresh perspectives. ➢ Also include individual work to avoid groupthink
STEEP	**Expand Horizons** Use of STEEP (Societal, Technological, Economic, Environmental and Political) categories reveals wider factors than may otherwise be considered. **Make Sense / Structure process** STEEP classification provides a structure	
Trend Analysis	**Expand Horizons** Identification of unexpected emerging trends that may significantly impact on policy area.	
Driver Analysis	**Make Sense / Structure process** Explore policy landscape in systematic way. Find trends that may impact on the policy area and drivers that may influence it. Drivers can be used directly to find policy responses (or risks) or as an input to scenarios	

Strategic vision

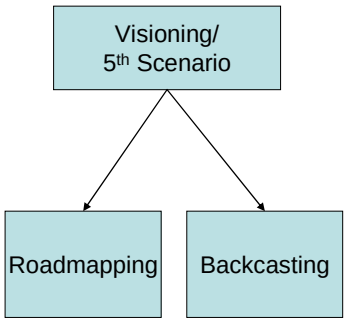
Determining a vision for a new policy area with participants new to futures



Techniques	**Benefit**	**Possible issues and mitigation**
Review Abstracts/ Trend Analysis/ Driver Analysis	As for *Scoping underlying causes* track.	
"Matrix" approach Scenarios **5th Scenario**	**Expand horizons/ Appreciating uncertainty** Exploring multiple scenarios before producing a vision helps refine it and ensure that it captures desirable elements of futures that may not have otherwise been considered.	Use "Applying" methods to further expand the paths to the vision and consider in the possibility of not realising vision.

Policy options from vision

Testing policy options for existing policy area under time constraints



Determine vision directly or from other scenario work

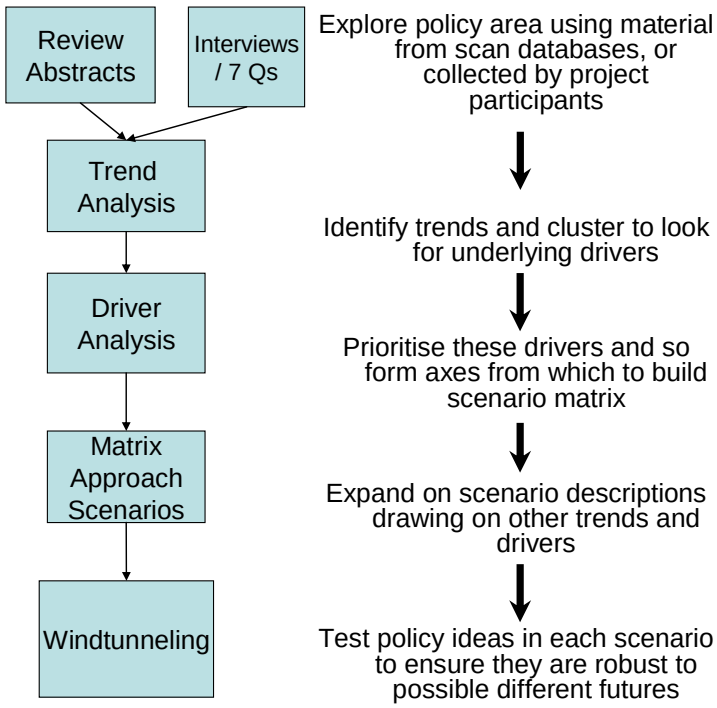
Make clearer the roadmap to a vision including drivers and timelines.

Backcast (work back) from a vision and identify enablers and barriers so help to reveal policy options.

Techniques	**Benefit**	**Possible issues and mitigation**
Visioning / 5th Scenario	As for *Strategic Vision* track.	
Roadmapping	**Make sense** Making clearer the path to a vision (or multiple scenarios) including drivers and timelines.	➢ Assumes that it is possible to realise vision within or using drivers, so explore these possible gaps as part of the process. ➢ Develop multiple paths to the future and recognise limits in policy influence to avoid a false impression of control over the environment or of a single way of realising future.
Backcasting	**Make sense** Working back from an ideal (or worst-case) scenario and identifying enablers and barriers more clearly maps out role that policy could play in realising vision.	

Testing new policy

Testing policy options for a new policy area

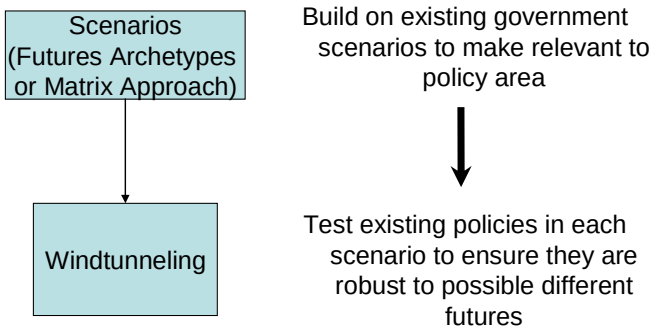


Techniques	Benefit	Possible issues and mitigation
Abstracts/ Trends/ Drivers	As for *Scoping underlying causes* track.	
Matrix approach Scenarios	**Make sense / Structure process** Add structure and understanding to a complex issue. Produce a small number of well defined worlds. **Expand horizons/ Appreciating uncertainty** Include varied possible worlds in defining policy area by considering drivers going in two opposed directions.	➢ Ensure scenarios are plausible and describe the way in which the world came about. ➢ Ensure that drivers other than the two chosen for axes are revisited and incorporated, in a variety or ways, to scenario descriptions. Also consider other scenario approaches if deeper scenarios are required.[7] ➢ For testing, drivers used in scenarios should ideally be value-neutral and capture elements outside direct government control. ➢ Scenarios used for testing should also provide a suitable breath of environments to make policies more robust to the future. ➢ If breadth of future possibilities is not adequately covered, consider creating more scenarios or using an alternative scenario method.[7]
Windtunneling	**Expand Horizons; Safely Exploring** Tests different policy options in diverse possible futures.	

[7] Suggestions on alternative scenario methods are provided in the detailed analysis document.

Testing existing policy

Testing policy options for an existing policy area under time constraints

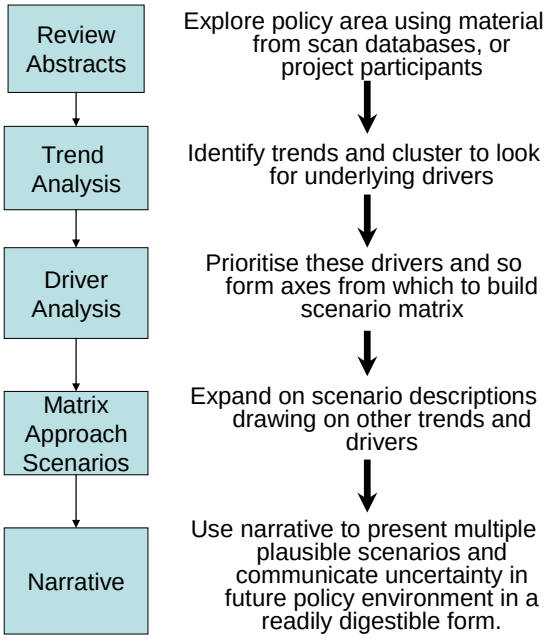


Techniques	Benefit	Possible issues and mitigation
Scenarios	As for *Testing New Policy* track.	
Windtunneling	**Expand Horizons; Safely Exploring** Tests different policy options in diverse possible futures.	➢ If using existing scenarios, then participants should add details relevant to their policy area to help ensure engagement and ownership in scenarios. ➢ For testing, drivers used in scenarios should ideally be value-neutral and capture elements outside direct government control. ➢ Scenarios used for testing also should provide a suitable breath of environments to make policies more robust to the future. ➢ If breadth of future possibilities not adequately covered, consider creating more scenarios or using an alternative scenario method.[8]

[8] Suggestions on alternative scenario methods are provided in the detailed analysis document.

Communicating Complexity

Exploring and communicating complexity of situation



Techniques	Benefit	Possible issues and mitigation
Abstracts / Trends/Drivers	As for *Scoping underlying causes* track.	
Matrix approach Scenarios	**Make sense / Structure process** Add structure and understanding to a complex issue. Produce a number of well defined worlds. **Expand horizons/ Appreciating uncertainty** Exploring varied possible worlds by considering driver going in two opposed directions.	➢ Ensure scenario descriptions are plausible and describe the way in which the world came about. ➢ Ensure that drivers other than the two chosen for axes are revisited and incorporated, in a variety or ways, to scenario descriptions. Also consider other scenario approaches if deeper scenarios are required.[7] ➢ Some audiences may not wish to engage with multiple scenarios. If this is the case, consider highlighting particular ones as best or worse-case, though still communicating range of outcomes. ➢ Consider also using different ways of presentation (e.g. images or video) if narrative does not capture all important elements of scenarios or engage audience.
Narrative	**Appreciating uncertainty** **Communicate complexity** Presenting multiple plausible scenarios can communicate uncertainty or complexity in future policy environment. Narrative explains this complexity in a readily digestible form.	