

## Annex 4: Introducing metrics into scenario thinking

You may wish to use the scenarios to explore how a number of key metrics – quantitative or qualitative indicators such as GDP, population and quality of life, for example – vary between different futures. You can introduce some basic questions to the scenario workshop discussion ('Is population higher or lower than the current baseline?') or you can combine the scenario logics with existing research to illustrate how different environmental conditions might lead to variation of important indicators.

Discuss the range of indicators with the process owner and think about how to introduce them into the scenarios. In general, workshop participants find it hard to be specific about metrics and, in general, you should limit conversation in the workshop to two or three key indicators of strategic importance to the policy area.

You can explore metrics in more detail once the scenarios are written. You may decide to develop the metrics as part of the scenario writing process or you may wish to present the scenarios to subject experts in a short workshop and explore how different scenario conditions might affect identified strategic indicators.

There is a range of ways to present indicators. Some exercises use numbers:

	Current	Perpetual Motion		Urban Colonies		Tribal Trading		Good Intentions	
		2025	2050	2025	2050	2025	2050	2025	2050
Energy price	106	140	45	140	150	300	400	140	175
World GDP	3.8%	4.0%	5.0%	3.5%	2.5%	1.5%	1.0%	4.0%	2.0%
UK GDP	2.4%	2.8%	3.0%	2.4%	1.8%	1.0%	1.0%	2.5%	1.3%
UK Population (mn)	60.6	68.0	79.0	68.0	79.0	62.0	57.0	67.0	80.0
Unemployment (UK)	5.4%	6%	<5%	6%	7%	15%	<5%	6%	10%
C emissions (MtC)		150	80	151	110	120	60	151	130

Some exercises suggest relative change:

	Current	Scenario 1		Scenario 2		Scenario 3	
		2035	2060	2035	2060	2035	2060
World GDP Growth	3.8%	↓↓↓	↓↓↓	↓↓↓	↓↓↓	↓	↓
UK GDP Growth	2.4%	↑	↑↑	↓	↓	↘	↓↓↓
World population (mns)	6,705	↑	↑↑	↑	↑↑	↑	↑↑
UK population (mns)	61.3	↑	↑↑	↑	↑↑	↑	↑↑
% of UK energy imported	21%	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑	↑↑↑
% of UK food imported	25	↘	↘	↗	↘	↗	↑

Both of the tables on page 99 show quantitative metrics. Qualitative metrics can also be used to illustrate change in the scenarios. The table below shows a range of attitudinal indicators that were used to illustrate the Intelligent Infrastructure Futures scenarios:

	PM	UC	TT	GI
Reduced personal freedoms and choice prevail over increased societal obligations and constraints (social capital/civic participation)	↓	↓	↑	↑
Tolerance of others in society/ value diversity/ reduced fear/ desire for reduced inequality prevails over increased individualism	→	↑	↑ (local) ↓(national)	↗
Respect for family structures (increased H/H size/ reduced social and geographical mobility)	↓	↑	↑	↑
Active ageing and respect for older people	↓	↑	↑	↑
Less desire for personal space prevails over communal living and travelling	↓	↑	↓	↘
Respect for Government and key institutions /enfranchised	↑	↑ (local) ↓(national)	↑ (local) ↓(national)	↓
Trust in science and technology	↑	↓	↓	↘
Willingness to give up privacy and take risks	↑	→	↓	→
Positives around role of media in society - influential	↑	↗	↓	↗
Throw away culture prevails over concerns about environmental waste	↑	↓	↓	↓
Concern about climate change	↓	↑	↑	↑

The tables shown here were developed in consultation with key stakeholders in the scenario process. You may also choose to work with research institutes to develop more detailed data to quantify the scenario narratives as Foresight did in the [Migration and Global Environmental Change scenarios](#). Here, Foresight used the scenarios to create assumed data sets for each of the scenarios through cross-referencing to existing projections from a range of related studies (IPCC projections for climate change, IASA for the population projections and World Bank for economic forecasts, for example).

The scenarios were then used for a range of quantitative and qualitative analyses – such as expected numbers of people living in urban flood zones by 2060.

