



# Scenario Planning – turning critical uncertainties into strategies for the future

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The desire to know the future is as old as mankind itself, one only has to look at ancient Greece and the stories around the Oracle of Delphi to be reminded of this. Unfortunately, we are not able to predict the future... which does not necessarily mean that the future must always be unknown. Some important factors that influence future developments are well known, many others are just as important, but more uncertain. Hence we tend to make assumptions about the future when developing a strategic plan. Many of the tools that we use, like ‘trend extrapolation’, work under the assumption that we know the structure of the system we are studying, and can therefore reliably predict outcomes. The environment of today, however, is often too complicated to be captured in a framework of workable laws. We are therefore faced with a dilemma – how does one formulate strategy in the face of seemingly overwhelming uncertainty? Determining the future of energy pathways, and resolving the climate debate are good examples of such dilemmas. It is in situations like this, that the use of scenario planning can make a valuable contribution by challenging our assumptions and benchmarking our vision about the future.

In essence, scenarios are plausible, pertinent, alternative stories of the future, which portray a range of potential outcomes and help in understanding how different factors interact to shape the future. Forecasters extrapolate from the past, imposing patterns from past onto future. Scenarios attempt to look beyond our limited mind-sets, recognising that possibilities are influenced by a wide range of people and views different from our own. The general purpose of building scenarios is therefore to widen the perspective of decision-makers, and in doing so, to widen and clarify their options for action. What makes scenarios so powerful, if done correctly, is that they seek the critical “what if?” questions to explore a range of possible futures. By doing so, they can change the way people think about the future and the assumptions they hold about it. Scenarios, if they are insightful can have an impact, can change people’s minds on how the world works, and even encourage them to rethink their own roles and contributions. Lawrence Wilkinson<sup>1</sup> states, “... the purpose of scenario planning is not to pinpoint future events but to highlight large-scale forces that push the future in different directions. It’s about making these forces visible, so that if they do happen, the planner will at least recognise them. It’s about helping make better decisions today.”

People can make assumptions without ever imagining that

their view may be inconsistent with the views of others, or for that matter, inconsistent with reality. One important element of scenario methodology is therefore to make assumptions explicit – to understand the current perspectives of relevant stake holders, most likely decision-makers. In particular, it is critical to understand what is considered to be important and beyond that, assumptions about what is likely to persist and what is likely to change.

Pierre Wack recommended separating the future into “predetermined and uncertain elements”<sup>2</sup>. Predetermined elements are those events which are “already in the pipeline” and can be expected to persist.

This first stage of scenario building is very intensive and requires careful studying to determine what is predetermined and what is uncertain. This helps in comprehending the driving forces of an environment’s future which often fall under five categories – society, technology, economics, politics, and environment. After determining an environment’s predetermined elements, the planner is faced with the challenge of identifying “critical uncertainties”, the resolution of which results in the manifestation of different futures, namely scenarios. When we can distinguish between what might persist and what might change, we can use this to expand our understanding of how the world works. This is important for both activists and entrepreneurs, because, as Ged Davis, former head of scenario planning at Royal Dutch Shell once stated, “...a trend is a trend until it bends...” – and at the bends are risks and opportunities for change. Following the identification of predetermined trends and critical uncertainties it is important to make interactions explicit. It is here where often the greatest opportunity for learning lies. This facet of the scenario method requires strong analytical skills and a capacity to understand systems.

Once scenarios are built we face a communications challenge. How can the complexity of alternative futures be made transparent and insights conveyed? How can the breadth of alternative futures be captured whilst maintaining relevance to the practical questions at hand? How can stories be made challenging and compelling without loss of credibility? The answer usually lies in a combination of words, pictures and numbers, depending on the subject matter and the audience.

The last facet of scenario planning is the evaluation of implications, and the generation and testing of options. Scenarios are very useful in helping draw out discontinuities and insights, which can then be turned into new strategies.

Looking at implications is therefore part and parcel of any scenario process, but not part of scenario planning methodology itself. Scenarios are a tool for helping decision-makers plan for the future – or rather for different possible futures – in cases of great uncertainty where the outcomes are ambiguous.

The World Energy Council has decided to launch a new global energy scenario exercise, following the Congress in Montreal this September. The last WEC energy scenario publication, *Energy Policy Scenarios to 2050*, was published in 2007. WEC energy scenarios are flagship publications, outlining WEC's own vision of developments in global energy. They are meant to increase visibility for WEC and to allow the inclusion of new developments and insights into WEC thinking in a structured way. They are also a platform for engaging policy makers and energising WEC member committees in regular discussions on topics of special interest, for example mobility, impact of renewable energies, water-energy nexus.

Drawing on the wisdom and experience of its global membership to develop a small set of distinct but consistent scenarios – “plausible stories of pathways into the future” – the World Energy Council, in the interest of our sustainable energy future, wants to provide a tool for stake-holders to test the robustness of their own assumptions and to benchmark the potential outcome of policies and strategies. The scenario work will start post-Montreal and will stretch over the better part of two years.

The project core team will consist of two staff members in London, supplemented by 6-8 regional members. It is planned that in each region a scenario team is set up and that at least one member per region joins the project core team. WEC is also in discussion with some industrial partners and research institutions to obtain additional resources for the scenario exercise. Energy companies Saudi Aramco and Petrobras have already confirmed participation and will commit staff resources to the scenario effort.

It is planned to hold at least five scenario workshops and several meetings on topics of special interest and concern for WEC members, for example urbanisation and mobility, access to energy and water/energy linkage etc. The workshops and meetings will be evenly spread across the regions and special topics will be chosen, based on current significance for the region. This will allow the deepening of regional insights and options for action.

In order to provide quantification of the scenario stories,

it is our intention to build a web-accessible open-source framework/global energy model, which can be used and expanded on by third parties like companies, governments, and experts. For this innovative approach to be possible, the framework has to be structured in a modular architecture so that third parties can develop and dock their own modules where they see fit. It is envisioned that an industrial partner with relevant experience in software development and providing web based solutions, takes a leading role during this phase of the project.

If you want to know more about this exciting new project, you can contact the Project Manager for Scenarios, Philip Thomas ([thomas@worldenergy.org](mailto:thomas@worldenergy.org)), or the Senior Fellow Scenarios, Karl Rose ([rose@worldenergy.org](mailto:rose@worldenergy.org)). □

1 Wilkinson, L. 'How to Build Scenarios'. *Wired Magazine*

2 Wack, P. 'Scenarios: shooting the rapids', *Harvard Business Review*. November - December 1985

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