

## Delivering sustainability through effective policy

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nergy is at the heart of the quality of life which most of us enjoy. It supports the necessities of life, notably clean water, as well as driving economic prosperity. The 1.4 billion people who, according to the IEA, lack access to electricity, are denied these benefits. The three challenges of delivering security of energy supply, of ensuring the environmental sustainability of energy systems, and of providing access to affordable energy for all, constitute one of the most difficult and important policy tasks for government and multilateral institutions: a policy task which if not executed effectively threatens the discharge of many of their other responsibilities.

This "trilemma", as it is often called, has been the focus of recent policy assessments by the World Energy Council, drawing on the expertise of its membership. Perhaps uniquely, the lessons derived from this work reflect the perspectives and expertise of both policy makers and of the private sector engaged in energy supply, transformation and use across several industries. The WEC's policy assessment work authoritatively synthesises these perspectives and contains some important messages for both policy makers and business leaders.

Why should the policy challenge in relation to energy be perceived as any different from other policy areas, many of which embody the need to balance competing interests or to make trade-offs, such as between affordability and the level of performance, for example? Among the reasons are: • Policy maturity: while it is some decades since the science was perceived as requiring significant policy action to tackle climate change, this nevertheless is a relatively new area of focus for policy makers compared to many other, more traditional, topics.

• Scale: addressing climate change will require a transformation in how we source, distribute and use energy – requiring the replacement of legacy systems in the energy, buildings, and transport sectors, legacy systems which have been built up over more than a century in the developed world. And all this has to happen at the same time as new systems are being built apace to meet basic needs and to deliver security of energy supply to burgeoning populations and expanding economies in the developing world, and at a time when many energy resources are becoming more difficult and/or expensive to access. The IEA estimates an investment requirement in the energy sector of US\$ 316 trillion by 2035, well above the trend rate of investment hitherto.

• Multiplicity of actors: policy is fundamental to deliver sustainable energy investment and to drive forward the deployment of such clean technologies at affordable prices for consumers, but most of the required investment will come from the private sector. Industry can and will provide innovation in low carbon, affordable solutions, but this dependence on the private sector to deliver is much more marked than in many policy areas.

• Timescales: many energy projects are huge and have significant pay back periods. Power grids are an obvious example. Even the lifetime of a power plant can be anything from 20 to 50 years or even longer. The right policy framework needs to give clarity, and enough confidence for the medium to long term, so that companies can make informed decisions. Of course, no-one believes, or even wants, that policies are set in concrete and unable to be adapted to changing circumstances. But a strategic vision must be communicated. Yet, though investments must look to a long-term horizon, they cannot be delayed without adding to the costs of mitigation of, and adaptation to, climate change.

Above all, these are global issues requiring all countries to act – with the consequences of inaction likely to be visited on the most vulnerable who are not responsible for GHG emissions historically.

## The WEC Policy Assessment Process

The WEC methodological framework developed over the last three years aims to identify effective policies and how they can be replicated, and does so through an index of country energy performance data; a review of selected country energy policies; and opinion surveys of energy industry executives and WEC member committees.

## "Pursuing sustainability": 2010 Assessment of country energy and climate policies

The WEC 2010 report showed how countries that have gained energy autonomy, using a diverse energy mix, with established energy efficiency programmes and that are balancing an environment favourable for investment with affordable energy, all supported by a strong policy framework, are in the top positions regardless of their initial energy resource or economic starting point. What makes the difference is a robust policy environment.

From the 2010 survey of energy industry executives, the major perceived threats – apart from the important exception

of increasing fuel/electricity costs or prices – were the following key inhibitors of successful policy implementation: • an unfavourable regulatory environment

- low public acceptance of policy measures
- mismatching of policy vision and industry preferences and
- slow execution of planning processes.

It is clear therefore that energy industry executives consider successful policies to anticipate and mitigate the impact of rising energy costs, and the removal of barriers impeding policy implementation, as essential to facilitate investment. The 2010 survey examined the barriers to investment, as well as the effect of policy uncertainty. The liberalisation of energy markets was believed to have driven performance improvements in some countries while, in others, problems with implementation affected the achievement of key policy goals. Subsidies or price caps, on the other hand, were thought to have deterred investment over significant periods – also with deleterious effects on security of supply and sometimes (paradoxically) on access to energy.

While just over half of industry executives were sanguine about the prospects for profitability, there were many with a more negative outlook and, for them, a major concern was possible changes in the policy or regulatory environment. As the report concluded, steps need to be taken to give greater certainty for large scale investments. Mechanisms to mitigate risk - such as loan guarantees, insurance schemes, co-investments, and policy stability - should be considered. Distortionary instruments such as price controls or subsidies should be removed to increase the availability of capital and, importantly, incentive packages should be underpinned by clear transparent analyses of the costs relative to the benefits. Moreover, policy design needs to factor in key co-dependencies, to ensure transmission and distribution infrastructure keeps pace with the development of new assets for power generation.

The WEC 2011 Policy Assessment develops this analysis further and offer additional insights to help policy makers and businesses meet these challenges.

## Conclusion

In the energy context, there is not a single stark choice between a market-based approach and government intervention. All systems exhibit features of both. The key design challenge is ensuring the policy framework is fit for purpose in delivering security of supply, sustainability, and access to affordable energy; while identifying and facilitating



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the appropriate contributions from the market.

I would offer two suggestions for how to facilitate successful policy design:

• First, transparency: meaningful public consultation on the need to act, a realistic and frank account of the risks and benefits of various options, and transparent analysis of the evidence on which choices are being based, not only helps secure popular buy-in. It also provides insights to inform companies in making investment decisions: as well as enabling the validity of the choices among the policy options to be tested.

• Second, involve the private sector.

Among the contributions businesses can make are:

• avoiding the delay which an uncommercial approach might entail, by advising on which approaches are most likely to succeed, and quickly discarding less promising ones;

• drawing on their practical multinational experience to advise on the status of particular technologies;

• helping to devise delivery frameworks which minimise overhead or transaction costs;

• advising on how best to allocate risk among the various market participants; and

• giving feedback to policy-makers about the interactions among different strands of policy, which are often not apparent to officials working on individual dossiers.

By engaging widely on such issues, and by harnessing the innovative approaches which business brings, policy design can be made more likely to succeed.