

REA response to the Renewable Energy Strategy

Introduction

The Renewable Energy Association is the largest renewable industry body in the UK, with over 530 member companies. The Association and its members are active across the full range of renewable energy technologies covered by the Renewable Energy Strategy (RES) and European Renewable Energy Directive (RED) including electricity, heat and transport fuels. The REA is therefore in a unique position to respond comprehensively to this consultation. We are also a participant in the wider Energy 2020 Consortium and commend its outputs and the Energy 2020 Manifesto, attached as Annex 7.

We share Government's objective to achieve a comprehensive and far-reaching Strategy, so would welcome the opportunity to expand upon any of the points made, and we look forward to working with Berr as it is further developed.

We welcome the emerging strategy described in the consultation document (which we refer to here as the 'document') as a step change in the way Government views renewables policy. There is recognition that a wider range of sectors will need to be involved, engaging energy users as well as suppliers. We are pleased to see acceptance that a renewable heat mechanism is required, that the RO cannot readily support small-scale generation and that sustainable biofuels have a key role to play in reducing transport emissions.

The renewed focus on energy efficiency is also welcome as renewable energy is complementary (and in some ways subordinate to) energy conservation.

We have structured our response in three sections:

1. **General points** – overriding principles that apply throughout our response (Pages 1 to 7)
2. **Proposals for each sector** – our recommendations to enable each sector to reach its potential contribution to the overall target (8-27)
3. **Responses to questions** – this provides answers to the questions posed in the consultation document (28-48)

Separate Annexes are presented (as listed on page 49)

In addition to stating the principles and policies we advocate, we also illustrate some *Dos and Don'ts* – proposed solutions and issues to be resolved.

Section 1: General points

There are six overriding priorities that apply throughout the response, these are:

- The need for speed
- Reaching and exceeding the target
- A broad and coherent approach
- Energy conservation and the energy hierarchy
- The contribution of energy users and consumers
- Consistency and investor confidence

Each is expanded on below but in summary the strategy should be:

☆ **Urgent** ☆ **Ambitious** ☆ **Holistic** ☆ **Efficient** ☆ **Inclusive** ☆ **Consistent**

The need for speed**URGENT**

The target now requires deployment at an unprecedented rate so the sooner the UK can accelerate development the better. Of the three sectors, heat, transport and electricity, the latter is the most developed, yet it still only makes up around a 5% share of total electricity, roughly doubling in five years. The target for 2020 will require more than a six-fold increase in about ten years. The increases for heat and transport will be even higher.

Don't act too late; only eleven years to 2020***Illustrating the issue***

The proposed UK target now requires a compound annual growth rate of about 18%. If we remain on the present track while we work up the strategy (by 2009) and the Renewable Energy Directive (RED) Action Plan (by 2010), we would then face the more daunting prospect of 23% growth each year until 2020.

Delivering timely measures that are good enough is preferable to taking too long over the design of perfect policy – especially as perfection is elusive.

Some outcomes of the strategy will require primary legislation – such as incentives for heat and decentralised renewables. These powers should be secured through the current Energy Bill, rather than delay until a legislative opportunity arises after finalisation of the RES. The REA has assisted in drafting amendments to provide these powers in the Energy Bill, and the debate has suggested there is a great deal of support across all political parties. The current Planning Bill similarly offers scope for resolving some consenting issues.

With the enabling powers in place, the policy detail can be elaborated in the RES and implemented via secondary legislation far more rapidly.

Reaching and exceeding the target**AMBITIOUS**

The UK has Europe's best resource of wind, tidal and wave energy, plenty of sunshine and a well-developed agriculture sector. Furthermore, a benefit of being so far behind most other European countries in renewables deployment is that we have greater untapped potential and can draw on the experiences of others.

Do: Shoot above the target***Part of the solution***

We should establish a policy portfolio to take us above the 15% mandatory target for 2020 – the REA advocates at least 18%. This will provide some contingency for shortfalls in any individual sector, especially as the scope for over-achievement in most areas is limited. In this context, the decision by the Government to reduce targets under the RFO is at best unhelpful and at worst unjustified on the basis of the evidence presented to the Gallagher Review.

It would be a very high risk strategy to assume that we could compensate for underachievement by buying in surpluses from other countries. Most States view their targets as highly demanding, and if there is any market at all in over-delivery, it is likely to be illiquid and expensive (contrary to the assertion in the document).

The 2020 target represents only a staging post to a contribution way over 15%. It is likely that our 2050 targets will require a fully decarbonised energy sector, for a host of reasons including energy security in the light of dwindling UK fossil fuel reserves,

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increasing import levels and prices, geopolitical risks and warnings by the IEA of an imminent “energy crunch”.

All our energy was renewable before the industrial revolution and, ultimately, ever scarcer and costlier mineral fuel resources and the need to mitigate climate change must drive us back to a wholly sustainable energy mix. If we don’t achieve this in a controlled way, catastrophe will force it on us.

The Government’s approach to energy costs needs to be changed to reflect these realities. The traditional comparison of costs per kilowatt hour is no longer appropriate if it ignores the externalities of emissions, waste storage etc. Nor does it reflect the comparative stability of known costs of renewable energy equipment against highly uncertain future imported mineral fuel costs.

For these reasons we should see growth in renewables as an investment in the future. And we should note Sir Nicholas Stern’s conclusion that the longer we delay, the more it will cost.

As similar issues face all other nations too, an explosive world market in renewable energy products and services is emerging, which offers an exceptional opportunity for UK industry. We believe Berr’s document has underestimated the job creation potential – nearly ¼ million jobs have already been created in Germany in getting to about half the level our target now demands.

Do: Raise the average and encourage the exceptional

Part of the solution

While overall energy sustainability will be steadily raised through regulation and obligations, there must be added incentives for those who want to do more.

The grid electricity mix, for example, will be progressively ‘greened’ by the RO, but users who want to install or buy renewables to raise their contribution to much higher levels must be encouraged.

In transport, the RTFO will bring a renewable content into the fuels we all use, but incentives for high-blends and flex-fuel vehicles will help early adopters go further.

While building regulations improve standards nationwide, further support should go to builders, property owners and local authorities who wish to exceed average national performance levels.

A broad and coherent approach

HOLISTIC

The Government wisely acknowledges the need to broaden the policy portfolio and bring a wider range of viable technologies into the mix.

Don’t limit the mix of renewable technologies

Illustrating the issue

This objective is hindered by the document’s sweeping assertions that solar PV has “limited potential to make a significant contribution to the target” and wave and tidal energy is “unlikely to generate large quantities by 2020”.

Photovoltaics seems to be shackled by cost estimates which do not reflect the true user value, nor recognise that as a solid state semiconductor, it can reduce costs by orders of magnitude as volumes increase. Internationally PV has been the fastest growing renewable sector at over 30% compound for over a decade.

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Marine renewables are at an earlier stage, but a proactive approach to deployment in the UK at this pre-commercial phase can create a national competitive advantage. The UK was in a position to do so in the early days of wind energy but failed to take advantage, allowing other countries to usurp our leadership position.

The document considers the potential contribution of each technology. We believe this is of limited value beyond confirming that the targets are practically achievable (which they are). In addition to reservations about some of these estimates we would discourage Government seeking to select which technologies to support.

It should establish a framework under which all prospectively useful renewable sources can come forward. Some may then fail to make a significant contribution in the free market, but this should not be because the strategy has 'selected them out'.

The document also acknowledges the need to broaden the policy portfolio beyond the historical focus on merchant energy generation. This means that demand 'pull' measures will need to be adopted too (as discussed further under 'encourage the exceptional' above and 'energy users' below) and made consistent with supply 'push' measures such as the RO and the RTFO.

Energy conservation and the energy hierarchy

EFFICIENT

The REA adheres to the principle of an energy hierarchy¹, and it is a theme which runs throughout this response. It applies to all energy uses – but is often not vocalised in the context of transport, for example. Energy conservation means taking fewer journeys, energy efficiency means using vehicles that cover greater distances for the same amount of fuel. The UK should strive for both, as this will reduce total UK energy consumption and assist with us reaching the overall 15% renewables target.

Do: Use all the tools in the box**Part of the solution**

The targets are sufficiently demanding that it will be necessary to use all effective renewable technologies and applications within the mix. We cannot hope to meet the 2020 and future targets by picking 'silver bullets' (as might be suggested by figure 1.4 in the document).

This broader approach demands tight policy coherence such that measures in one area do not create unintended adverse consequences elsewhere (such as those discussed under 'energy users' below).

We make no apology for the fact that our response includes a large number of constructive proposals.

While our remit focuses on energy production rather than conservation, we agree that energy efficiency is a vital part of meeting the UK's renewable energy target, and is complementary with renewables in many ways.

¹ See <http://www.r-e-a.net/policy/rea-policy/EnergyHierarchy.pdf>

The contribution of energy users and consumers**INCLUSIVE**

Environmental awareness has been encouraged and has grown greatly over the last decade. Ultimately, consumer pull has the potential to be the strongest and most enduring signal. Once the 'playing field is level' and the right signals and information are in the market it is customer demand which will sustain the renewables market.

Energy policy should therefore start by optimising demand for conservation and renewables. Yet recent policy decisions not only ignore the consumer demand aspect, but often work in the opposite direction, cutting consumers out completely. Prime examples are the Ofgem green supply proposals and Defra's guidelines on greenhouse gas emissions reporting. Central to this problem appears to be concerns over emissions rights, and this is discussed separately in Annex 4.

Don't ignore or alienate commercial energy users***Illustrating the issue***

In formulating their environmental policies, several large energy users have laid plans to install renewable energy systems on their sites under the RO. The latest guidelines from Defra state that the energy delivered from such systems cannot be treated as zero carbon for the purpose of environmental reporting – it should be accounted for at the grid average (about 5% renewable).

Similarly Ofgem's green tariff proposals mean that if such users were to contract to buy renewable energy from an energy supplier that too would be classified as 'brown' power.

This approach may be understandable from the viewpoint of Government's accounting of the effects of each policy measure and additionality, but it is incomprehensible from the users' perspective. These companies will ditch their plans and potential new renewable capacity will actually be lost!

Deploying renewables at the level required to meet the 2020 target will mean significant changes that require public acceptance. Nurturing consumer demand is a great way to engage the public and should lead to greater understanding, acceptance and feeling of ownership. Consumers should therefore be encouraged to buy renewable energy via the grid or install a system at their home.

Support policies for renewables exist because the benefits to society are not yet recognised in the market price. The long-run policy goal should be to get renewables to the point that they can compete with fossil fuel alternatives without additional support and with social costs of waste and emissions fully internalised into the price. That will occur sooner if a market for renewable electricity and heat is encouraged.

Microgeneration is another area where consumer demand is not adequately recognised. The document raises concerns about the costs, but doesn't weigh the additional benefits that renewable energy systems bring to individual consumers. The RE-charge scheme proposed by REA is a way of harnessing this consumer demand.

Importance of consistency and investor confidence**CONSISTENT**

Some of the proposals in the document are very far-reaching and the targets represent a quantum change from the path we are now on. Free market operation will not deliver this on its own, yet most of the investment required will come from industry and the financial sector.

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That will require strong, clear policy signals from Government and consistency to minimise perceived 'political risk'.

The success of any policy, which needs to attract industrial investment, depends on investor confidence in its design and in any changes made to it. Renewable energy is a new industry with therefore a higher perceived level of risk. The more that risk is minimised, the lower the cost of developing projects and the higher the level of deployment.

The newest policy mechanism in the sector is the Renewable Transport Fuels Obligation. Before this has had the time to bring new investment into the sector, proposed changes are already raising the perceived political risk.

Don't downgrade the targets***Illustrating the issue***

The Renewable Transport Fuels Obligation (RTFO) was introduced just five months ago with a target of 5% by volume in 2010. It is now suggested that this milestone be deferred to 2013/14, on the basis of sustainability concerns. REA respects those concerns but urges government to address them by actively championing its pioneering sustainability reporting and by making mandatory disclosure of fuel sources..

The Renewable Energy Strategy states that not having a 10% contribution from transport would make achieving the UK's overall target 'very difficult'. Delaying the 2010 target makes the task of meeting the 2020 target all the harder and may require even more stretching targets for heat or electricity generation.

More fundamentally, a change of this scale so early in the life of a long-term policy measure leads investors to doubt what other changes the Government might make. This can stifle investment in new projects – as is now happening in the biofuels sector – and destroy the likelihood that the necessary capacity can be financed.

The most established policy mechanism in place is the Renewables Obligation, and whilst the document suggests it has concluded that the RO is the best mechanism for bulk electricity it raises the prospect of some worrying developments.

Hanging in the air is a suggestion that the obligation will introduce a band for every technology, possibly with further sub-bands. Adding such additional complexity would be counter-productive. We elaborate our suggestions for how the RO could be developed in Annex 3.

Do: Keep the RO 'fit for purpose' to 2020***Part of the solution***

Resist the urge to further complicate the RO. Don't put each technology in its own band or introduce sub-bands, as suggested on page 97.

There are a number of other relatively far reaching questions in the document, which are presented without any detail nor explanation of how they might work or what the process might be for developing them further. One such example is whether the buy-out price should be adjusted according to the power prices. Such open-ended question marks hanging over the Obligation could adversely affect investor confidence, particularly in a world of rising supply chain costs.

Every effort should be made to simplify the RO. This could be achieved by removing elements which we argue should never have been in the RO in the first

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place (listed below), plus some specific recommendations on biomass and co-firing elaborated in Annex 3.

Given the urgency highlighted in this response, we would like these changes to be made as soon as possible. Enabling powers should be sought under the current Energy Bill.

- 1) Small scale generation
- 2) Renewable heat

Investor confidence concerns have influenced several of our responses. For example it is why we propose the retention of the Renewables Obligation for large-scale generation and support grandfathering. It is also the reason we have highlighted the need for any biofuels targets to be mandatory.

In addition to stability, simplicity is also important for investment confidence. Investors need to be able to understand what the returns are for what they're investing in. This is why we are concerned about the proposals to band the RO further, and why we propose a more straightforward tariff system for users outside the energy industry.