Institute for European Environmental Policy

Synergies between Renewable Energy and Nature Conservation: Messages for policy for 2030 and beyond

Martin Nesbit

27 January 2016

European Parliament breakfast meeting

The context for our report

- Written and published before the COP21 outcome
- Written in the light of the October 2014 European Council conclusions:
  - "Binding at EU level" target of 27% renewables by 2030
  - No "nationally binding targets"
  - "fully respecting MS freedom to determine their energy mix"
  - Individual MS free to set their own higher national targets
- Commissioned by RSPB and BirdLife Europe
  - Analysis of implementation of the 2020 renewables package
  - Focused on both (i) effective decarbonisation and (ii) environmentally positive deployment of renewables

Institute for European Environmental Policy

Assessing the 2020 Climate and Energy package

- Limited reference to wider environmental concerns in the legislation underpinning the 2020 targets
- Importance of binding targets:
  - Relatively effective in obliging Member States to act
  - However, they risk over-prioritisation of a few readily available options, rather than the most environmentally sustainable options
  - Can skew the profile of investment in renewables
- More effective permitting processes could help
- NREAPs form a strong basis for assessing progress
  - But need a more explicit spatial dimension, and more focus on broader environmental sustainability
- Support schemes focus on quantity, not quality
- The special case of biofuels and bioenergy

Environmental legislation and renewable energy

- Climate and energy policy do not act in isolation; environmental legislation has a key role to play in directing investment to appropriate uses and sites
- Coherent, comprehensive and geographically specific plans for renewables deployment can help both assess impacts properly, and provide certainty to investors
- Strategic Environment Assessment Directive and Environmental Impacts Assessment Directive, nature directives, and Water Framework Directive all play a role
- But (i) lack of spatially explicit plans for delivery of renewables makes it difficult to address impacts, particularly those related to cumulative scale of deployment and (ii) dependent on effective implementation

Types of impact on biodiversity

Dimension	Nature of interaction	Examples of challenges
Systemic environmental concerns	Importance of real world GHG benefits Impact of energy sources on natural resources	Limitations of accounting standards and sustainability frameworks have led to biofuel use with limited GHG benefit
Scale and capacity concerns (ecological capacity)	Cumulative impacts Impacts of associated infrastructure (e.g. grid)	Cumulative impacts of small-scale hydro Limits to scale of deployment at appropriate sites
Siting	Location is key to determining environmental impacts	Some technologies appropriate only in some sites; some (e.g. tidal) invariably in sensitive sites.
Project design	Site characteristics determine most appropriate design parameters	Is the intervention reversible? Is it possible to maximise positive environmental impact?
Ongoing management	Ongoing management can affect biodiversity impacts Sustainability of biomass feedstock	Scope for halting wind turbines at time of high risk to migratory species Type and origins of biomass feedstock critical to impact.

We need a vision for energy to 2030 and beyond

- Targets and legislation need to be based not just on meeting a particular share in 2030, but on a clear vision for long-term decarbonisation of energy systems
- Failure to provide a long-term perspective risks:
  - Stranded assets in fossil-fuel based investment, and a more costly long-run trajectory to decarbonisation
  - Insufficient attention to scale and location of renewables deployment, and consequent risks to wider environment
  - Lack of clarity for investors, and delayed investment

The October 2014 European Council conclusions

- Some key problems:
  - Lack of Member State specific targets on renewables
  - Lack of ambition on energy efficiency's contribution
  - Lack of investor certainty
  - Focus on "cost-effectiveness" interpreted in a short-term perspective; insufficient attention to long-term costs, impacts, and effectiveness
  - May not in practice allow more ambitious Member States to deliver higher aggregate decarbonisation
- Additional issues:
  - Lack of clarity over whether LULUCF contribution is additional
  - Flexibility to transfer effort from the non-traded sector (transport, agriculture, etc) to the Emissions Trading Scheme
- On the positive side, a commitment to a more holistic approach to MS policymaking and reporting

Conclusions and recommendations (i)

- Renewable energy is not a technologically and spatially neutral challenge
- A clearer and more specific legislative framework for renewables would help create confidence necessary for investment
- An approach based on voluntary MS commitment cannot be relied on to deliver
- Environmental and long-term rationale for renewables risks being undermined by approaches which encourage an over-emphasis on lowest-cost technologies

Conclusions and Recommendations (2)

We therefore need:

- Renewable energy targets at Member State level
- Stronger and more complete sustainability criteria for biomass-based renewables
- The strands of energy policy planning and monitoring to be brought together in a single framework
- Effective implementation of the Strategic Environmental Assessment and Environmental Impact Assessment Directives
- Replace undiscriminating biofuels targets with specific mechanisms to encourage advanced biofuels

Conclusions and Recommendations (3)

And these should be accompanied by:

- An emphasis on planning for further mitigation post 2030
- Explicit attention to land use implications and biodiversity/wider sustainability impacts in national energy planning
- Improved regional cooperation among Member States
- Requiring Member States to address the problem of investor certainty (particularly if we end up without national targets)
- Greater clarity on how energy market and grid policy will help promote integration of renewables
- All Member States to take a long-term, strategic approach to energy and renewables planning, within a supportive EU policy framework

The impact of COP21

- Reinforces many of the messages in our report, particularly on the importance of a long-term perspective
- More ambitious decarbonisation targets now clearly necessary (rendez-vous in 2018/19 for a more ambitious EU NDC) - which places greater emphasis on early deployment of ambitious renewables and energy efficiency investment

Institute for European Environmental Policy

40 YEARS OF ADVANCING POLICY

IEEP is an independent, not for profit institute dedicated to advancing an environmentally sustainable Europe through policy analysis, development and dissemination.

In 2016, we celebrate 40 years since IEEP was established!

www.ieep.eu

@IEEP_eu

Follow us!