

Editorial

A Question of Targets

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A Question of Targets

Editorial by David Baldock



There are a number of questions about the EU's commitment to the environmental agenda in 2014 but none is more important than the position to be taken on climate related targets to 2030. The emissions reduction target adopted for 2020 was far from ambitious and up to now it has not proved possible to revise it despite determined efforts by several important players on the European stage. By contrast, the accompanying targets on renewables and energy efficiency have been a major spur to action. The imminent public debate about the form and ambition of 2030 targets will be a crucial test of the EU's stance, sending signals both to global partners and a wide swathe of European industry weighing up investment decisions in a dozen or more economic sectors. Commission proposals are expected imminently.

For the Commission the temptation is to focus on a single target for emissions reductions, set at the highest level that seems acceptable to more sceptical

Member States. This might lead to a relatively rapid decision and consequent message to the rest of the world ahead of the coming negotiations in Paris, which would be of value. Furthermore, there is a vocal group of Member States, led by the UK, which is opposed to more than one target in the future climate package.

However, this course raises several difficult questions. Is it realistic to meet a reasonably ambitious target without further substantive EU measures, which puts a heavy onus on the EU Emissions Trading Scheme? What will be the spur in those parts of the economy not affected by emissions trading? What would be the impact on green innovations the EU is still a global leader? With so much of the momentum behind the green economy in Europe dependent on increased investments in renewables and energy efficiency, how can momentum be maintained without firm policy commitments?

Binding targets for renewables need to be formulated in a

different way than the present ones but removing them altogether suggests a very significant retreat that may be hard to reverse. Similarly, omitting energy conservation targets from the new package for 2030 would signal doubt about whether progress can be accelerated on an issue which is key both to long-term climate stability and reducing Europe's costs base.

If the Commission does opt for a single target for emissions reductions only, those in national capitals and the European Parliament who believe in the case for a wider agenda and in three targets, must not lose their nerve.

Enhancing the enforcement of European environmental law



Adopting EU law to protect the environment is only a first step – enforcement is a further challenge. A new IEEP-led report explores the potential for a new EU instrument to enhance law enforcement.

Adopting new EU law and transposing it into national law are only first steps. The law then needs to be enforced. EU environmental law places many obligations on businesses, individuals and others regarding pollution limits, biodiversity protection, waste management and so on. Member States are responsible for ensuring these obligations are met, for example through the use of dedicated environmental authorities or specialist branches of the police or customs.

Good enforcement practice requires planning, checks (inspec-

tions), reporting and follow-up if infringements are found. However, EU environmental law is highly variable in how it addresses these enforcement functions. For example, some Directives require inspections to be carried out at particular frequencies, whilst others make almost no reference to enforcement.

Failures to enforce environmental law adequately lead to environmental damage, human health impacts, loss of revenue and lack of a level playing field in the single market. A key contributing factor is the varied approaches of Member States to inspection and enforcement, influenced by budgetary constraints, cultural differences and so on. This situation has to change. As a first step, Member States should recognise their responsibilities in implementing EU law, but it may also be appropriate to adopt a new EU legal instrument to enhance enforce-

ment activity in the Member States.

A new **IEEP-led study** for DG ENV has found clear evidence of inspection and enforcement problems across the body of EU environmental law and the 28 Member States. The study also assesses whether a new horizontal instrument to enhance inspection and enforcement activity across all EU environmental legislation would be beneficial. It concludes that, if correctly formulated, such an instrument can appropriately cover all aspects of environmental law and provide a sound basis for enhancing enforcement capacity in the Member States.

For more information contact:
Andrew Farmer

Impacts of climate change on European islands



Islands are particularly vulnerable to climate change due to their direct exposure to its impacts. In a report for Green/EFA MEPs, IEEP identifies concrete climate change risks facing European islands – including the EU’s Outermost Regions (ORs) and Overseas Countries and Territories (OCTs) – and underlines the need for greater policy attention on this issue.

Despite their very important role for biodiversity, agriculture and tourism, European islands’ concerns are often underrepresented in EU and national policy-making. One particular concern for European islands – including the ORs and OCTs – is the risks related to climate change.

Islands’ infrastructure such as airports, sea ports and highways is often located near the coast and hence particularly vulnerable to sea level rise and flooding. For many islands, the agriculture sector is crucial for minimising dependence on food imports and an important source of foreign revenues from agricultural exports. The report shows that in the long term most islands will face decreased crop production and at the same time higher costs for water irrigation. Many islands are strongly dependent on revenues from tourism with a share in the island’s GDP of 20 per cent or even higher, yet tourists’ motivation to visit islands can be compromised by climate related effects. Finally, around 70 per cent of Europe’s biodiversity is located on islands and the loss of islands’ unique biodiversity as a result of climate change could be huge.

The study shows that climate change is not an abstract threat that may occur in the future but a concrete risk with consequences that are already visible. However, the consequences are not limited to the islands themselves but reach well beyond their borders and are beyond islands’ capacities to address them on their own. A strengthened cooperation between islands and the mainland, as well as between North and South, is therefore warranted.

The full report can be downloaded [here](#).

The annex with the five case studies covering Macaronesia (Azores, Madeira; Canary Islands), the Greek islands, La Reunion, Netherlands Antilles and French Polynesia / New Caledonia can be downloaded [here](#).

For more information contact:
[Raphael Sauter](#)

‘Bio-based’ – a sustainable way forward for the European economy?



Europe has considerable potential for transforming biomass wastes and residues into energy, bio-based chemicals and plastics, using advanced conversion technologies. IEEP’s report for the European Parliament highlights the need for environmental safeguards to accompany such developments.

These were the key findings of a recent report by IEEP for the European Parliament. The report is timely given the growing interest in new biorefinery technologies to convert biomass into energy and novel uses as bio-based chemicals and plastics – also referred to as the ‘bioeconomy’.

Outside of the traditional biomass using sectors (food, feed and forestry), European renewable

energy targets in recent years have steered biomass use towards combustion to generate heat and electricity, as well as the production of biofuels for transport (mostly from sugar, oil and starch-rich crops).

Concerns about associated negative environmental impacts have triggered interest in secondary resources, such as agricultural and forestry residues and food waste. IEEP reviewed a range of advanced biorefinery technologies needed to convert wastes and residues into biomaterials and bioenergy, and found that Europe possesses considerable potential both in terms of resource availability and technological development.

However, there are also significant uncertainties for investors and other market participants. These include barriers such as a lack of comprehensive collection infrastructure for secondary resources

and insufficient access to finance for ‘first-of-its-kind’ processing plants.

Most importantly, the sustainability of an emerging bio-refinery sector is critical, but the necessary safeguards are not currently in place. To warrant public support for the sector, there has to be visible assurance that bio-products are indeed environmentally preferable – with respect to greenhouse gas emissions, water, soil and biodiversity impacts – to the fossil-based alternatives. Therefore, IEEP concludes that policy makers do well in devoting attention to the sector’s development, but only in the presence of strong sustainability safeguards.

For more information contact:
Bettina Kretschmer

State of play in natural capital accounting and water quality



IEEP has produced a new briefing discussing progress and challenges in water quality accounts in the context of natural capital accounting.

Water quality accounts can support water management and policy by improving the structure and coherence of information. They can be analysed together with water quantity accounts and other environmental economics accounts (e.g. land accounts, environmental protection expenditure accounts) to help make better policy decisions.

Whilst there is already considerable experience with accounting for water quantity, water quality accounts are still in their infancy. The UN's [System of Environmental-Economic Accounting \(SEEA\) – Water manual](#) includes a general discussion on the key

methodological challenges related to accounting for water quality, but does not provide a standard.

Water emission accounts and ecosystem accounts also provide information on water quality. The former measure a key pressure on water quality, whereas the latter analyse the condition of ecosystems and the flows of ecosystem services (i.e. benefits that humans receive from ecosystems). Water emission accounts are prepared by many countries and the [SEEA Central Framework](#) provides standards that allow homogenisation and comparability. Ecosystem accounts are currently in a more preliminary phase. The UN's [SEEA Experimental Ecosystem Accounting](#) provides some guidance (but not a standard) on how to develop them. First attempts of ecosystem accounts are currently being developed by the European Environment Agency and the [State of Victoria, Australia](#), among others.

National experimentation and dialogue between those developing accounts and those who will potentially make use of them will be essential in the coming years to improve the quality and policy use of water accounts.

The IEEP briefing on natural capital and water quality accounts is available on both the IEEP and [TEEB webpages](#). It was commissioned by UNEP and funded by the Norwegian government, and as a follow-up to the [TEEB for Water and Wetlands report](#). The latter was recently presented during two webinars organised by UNEP with IEEP, Ramsar and Wetlands International presenters (see all material [here](#)) as well as at an international training workshop in [Kampala, Uganda](#).

For more information contact:
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Latest research on reducing the EU's resource use



Two new IEEP reports provide invaluable insights into reducing the EU's resource use based on the analysis of real world policy mixes.

Key success factors in policy mixes aiming to reduce resource use relate to the design of the policy mix and issues of governance. Also important are enabling factors such as having a clear understanding of ecological limits and thresholds, striking the right balance between effectiveness and acceptance, predictability of effects of the policy mix, and built-in monitoring, review and response mechanisms.

Through the FP7-funded DYNAMIX project (www.dynamix-project.eu), IEEP has produced two reports analysing 15 existing policy mixes that address different resources: a case study summary report and a comparative analysis.

The reports will shortly be available at <http://dynamix-project.eu/>.

The policy mixes evaluated address land, wood, fish, aggregates, fertilisers, fossil fuels and waste from countries within the EU and beyond. The complexity of a policy mix is linked to the complexity of the resource as it goes through the economy, hence the UK's aggregates policy mix comprises only two or three instruments, while Denmark's fertilisers policy mix contains more than 15 instruments.

The evaluations also helped to identify the levels of 'decoupling' achieved. Decoupling entails breaking the link between two variables – economic (often GDP) and environmental (resource use and/or its impacts) – so that economic performance continues to improve while environmental impacts reduce.

The DYNAMIX project runs until the end of 2015 and aims to propose up to five policy mixes to help the EU achieve absolute decoupling of resource use by 2050. IEEP is leading the evaluation of these policy mixes which will take place throughout 2014.

For more information contact:
[Doreen Fedrigo-Fazio](#)

Europe's role in feeding the world in 2050



What is Europe's role in feeding a growing world population now and in 2050? And what role should science and technology play? IEEP has produced a synthesis of five reports for the European Parliament's Science and Technology Options Assessment (STOA) Panel aimed at answering these questions.

The synthesis focuses on options for increasing agricultural productivity whilst adapting to various environmental challenges. These include addressing climate change impacts and reducing emissions from agriculture, reversing continued declines in farmland biodiversity, reducing food wastage, achieving a more resource-efficient food sector, and the options for using wastes and residues to meet biomaterial and

bioenergy needs in a sustainable way.

The synthesis points out how Europe's common environmental and agricultural policies, with greater emphasis on both the environment and innovation, provide an opportunity to initiate a change in direction.

IEEP led two of the underlying studies, looking at the interactions between agriculture and climate change, and between agriculture and biodiversity; and at recycling crop and food residues for sustainable bioenergy and biomaterials. The reports were promoted at a European Parliament conference on 4 December 2013, chaired by three MEPs and attended by around 100 representatives from NGOs, food companies, supermarket chains, farmers' associations, researchers from the Commission and Parliament, and students. IEEP Director David Baldock summed up the body of

work by highlighting the priorities for a positive plan for Europe to actively conserve its own resources for food production, to increase resource efficiency, foster innovation and best practices, and to reduce Europe's overall demands on the world food system.

All the reports, presentations and videos from the day can be found [here](#).

For more information contact:
[Evelyn Underwood](#)

IEEP Conferences and Events



Environmental tax reform in Europe: Opportunities for the future

IEEP office Brussels, 10 April 2014

IEEP will organise an experts' workshop as part of a study for the Ministry of Infrastructure and the Environment of the Netherlands. At the workshop, experts will discuss the draft findings of the study, share insights on experiences with environmental tax reform and prospects for the further greening of taxation in Europe.

Contact: [Sirini Withana](#) and [Patrick ten Brink](#)

Workshop on a Common Framework and Guidance for Biodiversity Proofing the EU Budget Brussels Late March / early April (TBC)

This stakeholder workshop will discuss and test a proposed framework and guidelines for biodiversity proofing (ie avoiding / minimising detrimental biodiversity impacts, and maximising biodiversity benefits) of EU funding instruments (eg CAP, Cohesion Policy, TEN-T, TEN-E and EMFF) as part of a European Commission contract. The workshop is likely to be of particular interest to those that are involved in managing EU funds or assessing their environmental impacts at a Member State or regional level.

Contact: [Andrew McConville](#)

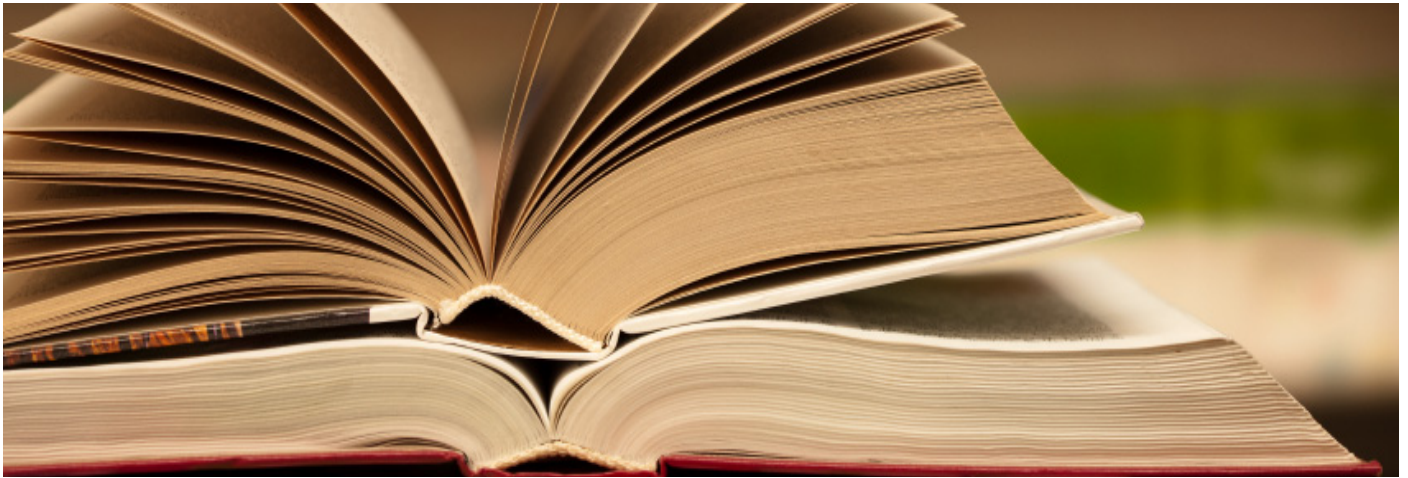
IEEP Biofuel ExChange Policy Workshops: The way ahead for biofuels post 2020

*Brussels, 12 February and London 18 February
2014*

IEEP has invited policy makers, as well as representatives from NGOs, academia and think tanks to reflect on EU biofuels policy and to consider the policy options for the post 2020 period as well as the more immediate time horizon. These events follow the recent failure of the Council of Ministers to find a common position on amendments to the EU Renewable Energy Directive and Fuel Quality Directive to address the indirect land use change impacts of biofuels. The debate will be set in the context of the Commission's energy-climate package for 2030, published at the end of January. Attendance is by invitation only.

Contact: [Bettina Kretschmer](#) and [Ben Allen](#)

IEEP Books and Publications



Impacts of climate change on European islands

19 November 2013

IEEP has just completed a new report on the impacts of climate change on European islands underling the very concrete risks islands are facing as a result of higher temperatures, changed rainfall regimes, weather extremes, and sea level rise.

Authors: Raphael Sauter, Patrick ten Brink, Sirini Withana, Leonardo Mazza

Steps towards greening in the EU

19 November 2013

Despite some positive steps, further efforts are needed to achieve the transition to a low-carbon, resource efficient Europe.

Authors: Doreen Fedrigo-Fazio, Sirini Withana, Martin Hirschnitz-Garbers, Albrecht Gradman

Enhancing enforcement obligations for EU environmental law

02 December 2013

A new study examines the challenge Member States face in ensuring inspection and enforcement of EU environmental law and considers the option of a new horizontal law to strengthen these requirements.

Authors: Andrew Farmer, Peter Hjerp, Axel Volkery, Mary Ann Kong, Shailendra Mudgal, Lucas Porsch, Johanna von Toggenburg, McKenna Davis

Options for sustainable food and agriculture in the EU

17 December 2013

How should Europe respond to the increased demands on our food and agriculture systems arising from global population growth, changing diets, and competing demands on agricultural land? This report offers a view on how the EU could play a role in meeting these challenges in the coming decades and sets out some of the options which merit particular attention.

Authors: Evelyn Underwood, David Baldock, Harry Aiking, Allan Buckwell, Elizabeth Dooley, Ana Frelih-Larsen, Sandra Naumann, Clementine O'Connor, Jana Poláková, Graham Tucker

Natural Capital Accounting and Water Quality: Commitments, Benefits, Needs and Progress

08 January 2013

A new IEEP briefing note discusses progress and challenges of water quality accounts in the context of natural capital accounting.

Authors: Daniela Russi, Patrick ten Brink



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