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Subject

Comments from the Netherlands Environmental Assessment Agency (PBL) on the European Commission's consultation paper on the future 'EU 2020' strategy

Hereby, I would like to present you with our contribution to the consultation on the future 'EU 2020' strategy. It points to the need of a vision for 2050 on which EU strategies for the next decade are to be based. Thus, the EU's aims for 2020 should be consistent with its ambitions for 2050, or the latter may never be realised. In addition, our contribution points to the EU role and responsibility as a global actor. Specifically, opportunities for a significant role of the EU on the global stage are arising now rather than later, as its potential leverage will shrink over the next decades.

A study just released by the Netherlands Environmental Assessment Agency in conjunction with the Stockholm Resilience Centre finds that a long-term EU vision, determining strategic priorities in the months to come, is of key importance.

Specifically, our work reveals the need to base strategies for 2020 on a vision for 2050. Key decisions need to be worked out for the next decade, based on such a long-term vision. This is necessary because of the magnitude and inherent slow pace of change, as well as the longevity of capital goods. In particular, realigning institutions and constructing large-scale infrastructure take decades to achieve. It is also imperative that interim solutions – say, for 2020 – do not lock the EU in a halfway situation, incompatible with its eventual aims.

In this vein, using models and backcasting, we identified a dozen strategic actions for the EU, already for the next decade. The analysis focused on:

- producing food to feed a global population of nine billion, while minimising biodiversity loss;
- mitigating climate change while enhancing energy security for the EU;
- and developing a low-carbon transport system in the EU.

In the context of setting the EU 2020 strategy, these three themes exemplify the need to address long-term issues of the EU's natural resource use and resilience, in conjunction with the economic and social objectives as articulated in the consultation document. Only if the EU 2020 strategy addresses these issues head on, with clear strategic actions identified, can its claims for eco-innovation and a greener economy be taken seriously.

Our analysis confirms the importance of setting the EU 2020 strategy in a global context. But it does so from a wider perspective than the consultation document, namely that of long-term sustainable development, rather than competitiveness in the near term. From this perspective, the global dimension of an EU 2020 strategy is important, *inter alia*, because the problems surrounding energy, climate, biodiversity and land resource are of a global nature. Moreover, the EU holds a number of trump cards, such as its agricultural science and technology; its market power as a large

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importer and, thus, the potential to initiate product standards, and a reputation for regionally collaborative government. Yet, a look at the economic macro trends makes it clear that the best time for deploying EU global leverage would be the 2020s rather than the 2050s.

In the light of a vision for 2050, the following key actions for the next decade emerge, for the three themes, with implications for EU governance. Analogous considerations also may apply to other EU dossiers.

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LAND USE

Global land-use changes are now taking place, somewhat in the shadow of climate issues. But even with the strong improvement of *agricultural productivity* projected by the FAO, a further three million square kilometres of land would need to be converted, in order to feed the world's population of 2050. This extra land claim is in the order of magnitude of the current agricultural area of Brazil or the United States.

For realising a vision of 'feeding nine billion people, worldwide, by 2050, and halting biodiversity loss by 2030', the EU should waste no time and exert leadership in global collaboration to *prioritise, protect and pay for key ecosystems and biodiversity*. The EU is well-positioned to take a lead in global collaboration, to *bridge diverging perspectives* on land and water resources, food and biodiversity, in the context of globalisation – as has been done for climate change.

Key to realising this vision is land productivity, and, therefore, putting research investment in agricultural systems back on track. It is critically important to invest in new research and technology, as well as in the implementation of existing technologies, especially in developing countries. Coherent and consistent input from the EU and its Member States through international organisations, although highly complex and sometimes hard to organise, seems a critical force needed to achieve the vision.


The suitable aim for the EU domestically seems to be to prepare for smarter agriculture – highly productive, as well as flexible, resilient and, where necessary, well-integrated in other functions. This should help to prepare for a crowded world where resources, such as land, water and perhaps phosphate, will be scarce and regional climate conditions keep changing. To this end, nurturing the present diversity in agricultural practices within the EU would contribute to buffering it against inevitable shocks to the global food system. Therefore, *diversity in land management* needs to be made a strategic aim of the post-2013 Common Agricultural Policy.

In a context of global collaboration on agricultural methods and looking back from 2050, the *Mediterranean basin* seems a logical pioneer area for a renewed agricultural and ecosystems policy. This follows from the scale of the changes needed in the region, in the coming decades, to adapt to climate change, a scale that makes EU involvement only logical. Moreover, if dryland agricultural and related territorial management were made an EU focal point, a new connection between the 'external dimension' and EU internal policies would be created.

ENERGY

A vision of 'a low-carbon EU energy system and increased security of energy supply for the EU' only makes sense if the EU continues to *lead in the global collaboration* against climate change, including its financing.

Domestically, attaining the vision requires preparations for *rapidly accelerating deployment of low-carbon technologies after 2020*, to achieve an 80% reduction in emissions by 2050, relative to 1990 levels, within the EU. For example, this involves standardisation, improving social acceptance of the



technologies involved, and adopting a clear target for phasing out power plants without carbon capture and storage.

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EU regulation will be indispensable in setting up an investment framework for the *continental-scale power grid* of the future, which is critical to a low-carbon EU economy.

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While the current Emission Trading Scheme provides incentives for gradual emission reductions at the least cost, the EU needs to develop powerful additional incentives and new institutional arrangements to also bring about *more radical* changes in the energy system. These require timely investments in the novel technologies that are needed for a low-carbon energy system, beyond the optimisation-type shifts induced by the current Emission Trading Scheme.

With restricted worldwide capacity for bio-energy production, *use of biofuels* needs to be concentrated in those applications with which the greatest contribution can be made to mitigating carbon dioxide emissions and for which no alternatives are available. These considerations on strategic use of bio-energy are over and above concerns about production, which, thus far, have received the most attention.

For instance, advanced biofuels offer potential for reducing emissions from long-distance road freight transport, shipping and aviation, where significant alternative energy carriers are not available. In addition, bio-energy combined with carbon capture and storage in power production enables large emission decreases, but requires forward planning. Conversely, good alternatives are available for urban passenger transport and the like.

TRANSPORT

'A low-carbon EU transport system that is economically viable' depends on technology advances and, equally, on challenging reductions in transport growth. In fact, projected growth in EU transport, as a whole, implies emissions have to be reduced by 2050 from baseline projections, by a factor of 12. In particular, emissions from road passenger transport will have to be reduced by as much as a factor of 20 or 25.

A sufficient supply of *low-carbon electricity for urban and medium-range transport* requires early action. This is irrespective of whether electricity or hydrogen will be the dominant energy carrier, as hydrogen would need to be produced electrically.

Critical to achieving low-carbon transport in the EU is timely international action on carbon dioxide emissions from *aviation and maritime transport*. By 2050, emissions from these categories will be as large as those from surface transport and will be more difficult to address, both technically and because they involve global policy setting.

Above all, *policy coherence on transport and climate* is vital for all portfolios of the European Commission. Add-on policies cannot achieve the envisaged emission reduction in EU transport, with the implication that the energy sector would have to achieve even steeper emission reductions to compensate.

EU GOVERNANCE

We find that achieving the vision for 2050 requires strengthening EU *decision-making powers* in specific areas. Moreover, the study identifies infrastructure on a scale that transcends the long-term certainty that Member States can offer. With the limited opportunities of the EU budget, one way forward is to use *EU regulatory powers* to offer investors a long-term perspective.

For instance, *diversity* emerges as being key for investing in an uncertain world. Diversity in sources and technology in the EU energy system; in transport solutions; and in land management styles for the EU to promote in its agricultural and regional policies.

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Another common factor is the need for a *strategic approach to interim solutions*. Depending on the issue, they may either form a risk to get stuck halfway, or be an essential step to reach the long-term vision for 2050. As an example of the former, analysis indicates that the EU energy system may flounder on efforts to resolve energy security constraints in 2020, by continuing to build coal-fired power plants without CCS, thus blocking low-carbon opportunities for 2050.

An essential condition for achieving the vision of the EU in 2050 is *strengthening the EU role on the world scene*. In this respect, there are opportunities to integrate an external dimension into EU policies, such as on biodiversity (prioritise-protect-pay) and on trade (product standards). However, the opportunities are somewhat time bound, as emerging world players are likely to dilute the EU's influence in a more crowded world.

In addition, some *improvements to EU internal governance structures* and strategic objectives would allow for greater policy coherence across policy portfolios; between the EU and worldwide; and between EU short-term and long-term strategies. Such improvements would be in the fields of further alignment of external policies; standards; strengthening EU decision-making powers in specific areas; instruments for long-term policy; and securing a route to continental-scale investments.

Thus, the same visionary foresight that founded the European Union half a century ago is needed today to chart the course of the EU through the coming half century, in a world of changing global relations and growing scarcity of natural resources. It strikes us that this is somewhat meagrely represented in the consultation document, while it is so well-reflected in the guidance document by President Barosso.

The bottom line, then, is threefold:

1. The EU 2020 strategy should be based on a 2050 vision – and apparently the current consultation document is not.
2. The EU has a role as a global actor and needs to play it – sooner, rather than later. We find that this applies to energy and climate, as well as to agricultural production and biodiversity. But the same point may well apply more widely.
3. For specific issues, we find that there is a need for an enhanced role of the EU – mostly through regulation, as opposed to EU finance. One example is the investment framework needed for setting up the power grid of 2050.

For any in-depth explanation, details, or further ideas, I hereby invite you to contact me, or Jan Bakkes, the project leader of this study (jan.bakkes@pbl.nl, +31.30.2743112).

Yours sincerely,


Professor Maarten Hajer
Director

A report containing the findings of our study can be downloaded from our website at <http://www.pbl.nl/en/publications/2009/Getting-into-the-Right-Lane-for-2050.html>. A background report on the implications for EU governance, and a short account of the launch seminar, hosted by the Swedish presidency, can also be obtained from our website. Speakers at this seminar included representatives from the Swedish and Spanish presidencies, among them the Swedish Secretary of State for Agriculture; Professor Žiga Turk Secretary-General of the Reflection Group, chaired by Mr Felipe Gonzales, speaking in private capacity; and Mr Claude Turmes MEP.