en 1/2016



28-29 September 2016

OECD Conference Centre, Paris

climate change

transition towards a circular economy

air pollution from transport biodiversity water nitrogen



Meeting of the Environment Policy Committee (EPOC) at Ministerial Level

28-29 September 2016

Chair's Summary

Environment Ministers from OECD and key partner countries gathered in Paris on 28-29 September 2016 to discuss the environmental challenges facing the world and how to promote effective and efficient policy responses. Under the guidance of the Chair, Minister Nick Smith (New Zealand) and the Vice-Chairs, Minister Irena Majcen (Slovenia) and Vice-Minister Marcelo Mena Carrasco (Chile), the meeting took place at a propitious time with important global agreements having been reached in 2015 on climate change, the Sustainable Development Goals, and financing for development. Implementation of these major agreements is now paramount on international, regional and national policy agendas, and the role of the OECD as a platform for supporting strong policy action and sharing experiences is now more important than ever.

The Secretary-General of the OECD, Mr Angel Gurría, opened the meeting by reminding us of the historic milestones that had been achieved in 2015 towards a more sustainable future. He noted that the challenge to deliver on those goals requires a multi-sector and multi-ministry engagement. Reaching out beyond Environment Ministers is critical to ensure that we have a strong alignment of policy priorities and agendas across governments. Making the case for taking action is an essential step, but Mr Gurría also emphasised that we need to ensure that we have strong analytical and political support for governments.

The meeting addressed a range of issues in plenary sessions and in a number of breakout groups. The issues of climate change and circular economy were discussed in plenary at the start and end of the meeting, with breakout sessions on air pollution from transport, mainstreaming biodiversity across sectors, effective management of marine protected areas, nitrogen, financing investment in water security, and urban water pollution.

Climate Change: Key Challenges Moving Forward

Minister Ségolène Royal (France), President of the COP21, kicked this session off by thanking countries who had already ratified the Paris Agreement, and urged other countries to do so prior to COP22. Minister Hakima El Haite (Morocco), Special Envoy and High-Level Climate Champion, reinforced this point by highlighting the importance of moving from negotiation to implementation and action at COP22. She stressed the opportunity provided by the Paris Agreement to integrate climate action with the broader development agenda, and the necessity to open climate discussions to other sectors, such as water, health and education.

In a presentation on the issue of short-lived gases, Professor Drew Shindell (Chair of the Climate and Clean Air Coalition Advisory Panel) emphasised that early targeted action (*i.e.* by 2025) on emissions of short-lived climate pollutants – black carbon, HFCs and short-lived gases (such as methane and nitrous oxide) – could be instrumental in addressing near-term impacts as well as providing benefits related to agriculture and public health. He stressed that measures on short-lived pollutants should not substitute for action on long-lived gases. Rather, an integrated approach addressing both short-term and long-term aspects is crucial to linking the climate agenda with the sustainable development goals.

In the discussion that followed, many Ministers recognised that a holistic approach to tackling climate change is needed. National strategies should encompass all greenhouse gases, across all sectors of the economy, though individual climate forcers need to be treated on a disaggregated basis given their different climate impacts and co-benefits, over different timescales. Early action to mitigate short-lived pollutants was identified by many Ministers as an important measure as it would reap a number of co-benefits. Identifying these co-benefits, as well as the synergies between actions on short-lived and long-lived climate pollutants was highlighted as being a particularly important step, All actors – ranging from cities, businesses, civil society, and ministries beyond environment – should be engaged in developing low-emissions pathways that will heighten the ambitions of current NDCs.

Ministers stressed the need to seize opportunities to take immediate action on methane, black carbon and HFCs, at national levels and recognised that further efforts to mainstream these initiatives into national (e.g. Nationally-Determined Contributions) and international policy-making could bring governments a step closer to achieving the goals set out by the Paris Agreement. In particular, they expressed the importance of agreeing on an ambitious amendment to the Montréal protocol in Kigali this year to limit the consumption and production of HFCs in line with the Paris goals.

Ministers identified a number of areas where the OECD could continue to support countries' efforts in developing the long-term low-carbon development strategies necessary to make sure short-term action is consistent with the longer term challenges ahead of us. Specifically, it is invited to:

- Continue to take a strong role in providing analytical support to understand the economic costs and benefits of climate action and inaction;
- Continue to provide a platform for sharing experiences on climate policy, as well as assessing best practices, including on carbon pricing and the issue of short lived pollutants;
- Include a detailed inventory of GHGs, including short-lived climate pollutants, in its future Environmental Performance Reviews and develop models of short-lived climate pollutants in order to help countries identify where targeted action is needed; and
- Contribute to elevating the debate of short-lived climate pollutants in the various international fora in which it is a key player.

The second part of the discussion focused on the issue of climate adaptation and was opened by Roger Pulwarty (Co-ordinating Lead Author for the IPCC's Working Group 2) who highlighted that climate adaptation will be needed on an unprecedented scale. He emphasised that there is a need to target pressing near term problems while also building flexibility to address future risks. This could realise a

"triple dividend" of economic benefits from improved resilience. The pathways and choices made in response to rapid changes and extreme events will shape future resilience, particularly including impacts on the most vulnerable parts of society. Enhanced collaboration between researchers and policymakers is needed to ensure that the right choices are made.

In the subsequent discussion, Ministers described how the consequences of climate change were already starting to be felt in their countries. Mainstreaming of adaptation across sectors was needed to ensure that those risks would be successfully managed. More effective water management will be critical, given that many countries face increased risks of too much or too little water. Ecosystems and biodiversity were also highlighted as sectors with a central role to play for adaptation.

A common theme of the discussion was the need to engage with a wide range of stakeholders to build resilience. Regional authorities and local governments need to be engaged and supported in building resilience, given their vital role in implementation in areas such as spatial planning. Several Ministers highlighted the central role of the private sector in this respect. It was also noted that indigenous people would be particularly affected by climate change and that they should be engaged in developing the responses, including through the use of traditional knowledge.

Ministers identified the following areas in which work by the OECD would be valuable in supporting their efforts to enhance resilience:

- Producing evidence to support further action, such as analysis of the costs of inaction or the vulnerability of global trade flows to the impacts of climate change;
- Examining how risk transfer instruments, such as insurance, could be incorporated as part of a broader strategy for adaptation;
- Analysing measures to increase private finance for adaptation, including tools such as green bonds, as well as how to include non-traditional actors, such as NGO or social enterprises;
 and
- Sharing reflections and experiences between countries, including through the use of sectoral analyses of adaptation in key areas, such as coastal erosion and agriculture.

Air Pollution from Transport

The Facilitator, Minister Carole Dieschbourg (Luxembourg), opened the session by emphasising the environmental pressures created by transport, including air pollution, to which transport is a major contributor. The economic and health costs from air pollution are significant and rising, and policy solutions are therefore essential to urgently tackle this challenge.

This breakout session benefited from several presentations from four experts to help set the scene. Mr. Jean-Christophe Béziat (Renault) emphasised that electric vehicles provide a way to reduce resource use and emissions of air pollutants and greenhouse gases associated with road transport. While the market for electric vehicles is growing rapidly, consumers still remain inhibited by the high upfront cost. Ms. Martine Meyer (Renault) highlighted four critical areas in addressing vehicle emissions:

standardised and repeatable tests to compare vehicles; developing laboratory tests that reflect real world emissions; introducing random sampling for in-service vehicles to check conformity with emissions standards over time; and including all stakeholders in the standard-setting process. Case studies in Rome and Hong Kong that have shown major reductions in population exposure to harmful air pollutants following a significant increase in electric vehicle uptake.

Ms. Michelle Harding (OECD) presented recent OECD work on the taxation of diesel and gasoline used in road transport, noting that in almost all OECD countries, diesel is taxed at a lower rate than gasoline on a per litre and carbon content basis despite its greater environmental and other social costs in terms of air pollution and greenhouse gas emissions. Mr. Olaf Merk (International Transport Forum) emphasised that air pollution from maritime transport is substantial, suffers from various policy gaps, and deserves attention from Environment Ministers.

In the discussion that followed, Ministers were positive about the increasing share of electric vehicles in the vehicle fleet, but noted that they represent only part of the solution for combatting air pollution. Ministers stressed that a holistic and dynamic approach is needed as electric vehicles also contribute to congestion so there is still a need to increase the availability and attractiveness of other transport modes (e.g. cycling, public transport) and decrease the need for transport overall (e.g. through greater use of ICT solutions). Ministers also expressed the importance of expanding the scope of electric vehicle uptake to heavy duty vehicles and buses.

Ministers agreed that there is a need for emissions standards for new vehicles that better reflect real-world emissions, but stressed that there is also a need to focus on emissions from vehicles already in use, e.g. through the use of information in the on-board diagnostic systems that are present in many vehicles and through more on-road vehicle testing. It was also noted that in the aftermath of "Dieselgate", trust in car manufacturers needs to be restored.

Ministers agreed that current taxation arrangements have had negative environmental impacts by encouraging use of diesel vehicles, and that road transport-related taxation should be adjusted to better reflect the externalities of fuel and vehicle use. The need to consider distributional concerns was also raised. Ministers also noted that shipping emissions require a global approach and standards set by the International Maritime Organization, and it was stated that there is a need to push this process forward.

Looking ahead, Ministers encouraged the OECD to continue its work on the economic aspects of air pollution from transport, particularly the issue of taxation and the benefits from action on reducing air pollution.

Mainstreaming Biodiversity across Sectors

The Facilitator, Minister Kimmo Tiilikainen (Finland), opened the session by emphasising the need for mainstreaming biodiversity given that protected areas are not sufficient to halt biodiversity loss and ecosystem degradation. The lead speaker, Mr. Carlos Manuel Rodriguez (Conservation International and former Environment Minister of Costa Rica) shared the experience of Costa Rica where institutional re-structuring, removal of economic incentives harmful to biodiversity, and instruments such as payments for ecosystem services have been used to mainstream biodiversity in the economy and society.

In the ensuing discussion, many Ministers identified the need for systematic national studies and assessments regarding the value of biodiversity and ecosystem services as well as the costs of inaction. The need to identify and map perverse incentives was also highlighted in this context. Ministers pointed to the need for an improved evidence base. Better monitoring and reporting and the development of indicators and metrics is needed to more effectively make the economic case for the sustainable use of biodiversity across all sectors and to enable coherent policy making. Agriculture was noted as a key sector to prioritise in many countries.

The need to develop and strengthen policy instruments that are able to provide the correct incentives to producers and consumers was also highlighted. It was recognised that mobilising financial resources for conservation and sustainable use is crucial and the policy instruments to do this exist, but there is significant scope for a greater use of such instruments. Moreover, it was noted that harnessing co-benefits (between biodiversity, carbon, watershed services, for example) can provide additional opportunities for finance. Finally, Ministers noted that for mainstreaming to be effective a broad group of stakeholders, including the government at various levels, need to be engaged.

Ministers noted that the OECD could contribute to deepening the knowledge in this area, including examining the co-benefits to harness synergies in mainstreaming, addressing harmful incentives, and on prioritising efforts in key sectors such as in agriculture. The importance of mainstreaming as a tool for SDG implementation was also highlighted.

Effective Management of Marine Protected Areas

The Facilitator, Minister Kimmo Tiilikainen (Finland), opened the session by emphasising the importance of marine biodiversity and the role of marine protected areas (MPAs) in ensuring its conservation and sustainable use. Professor Graham Edgar (University of Tasmania, Australia), shared the ingredients for success for more effective marine protected areas, including the need for more MPAs with no-take zones, and proper enforcement.

In the discussion that followed, a number of Ministers highlighted the often competing uses of marine ecosystems, between commercial fisheries, oil and gas, shipping, and other sectors. Stakeholder engagement was noted as an important factor in ensuring more successful MPA outcomes, including in the development of national MPA plans. Many Ministers also noted that the full range of pressures on marine biodiversity must be addressed for MPAs to be effective and highlighted the pressures emanating from pollution from land-based sources. More integrated approaches for management, such as marine spatial planning, were highlighted as examples to enable more systematic planning.

A number of Ministers also highlighted the existence of major information gaps in the context of MPAs, ranging from regular monitoring of MPAs to information on enforcement, financing expenditures and financing gaps. Areas where the need for further work was noted included more comprehensive inventories of assets and assessments of MPA effectiveness.

Looking ahead, Ministers encouraged the OECD to continue its work on oceans and marine ecosystems, in particular on issues such as effectiveness of policies, financing of marine protected areas, and in addressing trade-offs and harnessing synergies across various users of the marine space.

Nitrogen

The Facilitator, State Secretary Jochen Flasbarth (Germany), opened the session by emphasising that nitrogen pollution is a highly under-estimated issue with significant health, economic and environmental impacts. He highlighted a lack of political awareness of this issue and noted that there are many impacts of nitrogen pollution and a huge range of associated costs we are "implicitly accepting".

Professor Penny Johnes (University of Bristol), the lead speaker, emphasised that nitrogen pollution is a critical cross-cutting issue that poses five key threats: the greenhouse gas balance; air quality; water quality; soil quality; and ecosystems. She stressed that humans have massively increased the amount of reactive nitrogen entering the environment over the last century, particularly through the use of fertilisers in agriculture and fossil-fuel combustion. She noted that the scale of the problem is greater than acknowledged to date and that current policies to address nitrogen are not fit for purpose and more integrated approaches are required.

In the discussion that followed, Ministers agreed that nitrogen pollution is a "systems" issue; it moves among multiple media, takes multiple forms (e.g. ammonia, nitrates, NOx, N2O), and does repeated damage to the various components of the environment. It therefore requires systemic solutions to prevent further amplification of the cycle, though specific measures will still be needed for reactive nitrogen hotspots. Ministers discussed the political economy challenges of implementing cross-sectoral strategies for tackling excess reactive nitrogen. Ministers also highlighted the role of multilateral environmental agreements in supporting the dual aims of preventing reactive nitrogen entering the cycle and addressing nitrogen pollution hotspots.

Ministers called on the OECD to (i) provide a forum for sharing experiences with addressing nitrogen pollution in specific sectors (e.g. agriculture, transport) and assessing the consequences of inaction for global value chains; (ii) undertake case studies demonstrating how countries have successfully introduced measures and tools to address nitrogen pollution; (iii) analyse the potential pollution swapping effects (i.e. the conversion of nitrogen from one form to another) of nitrogen management policies.

Financing Investment in Water Security

The Facilitator, Vice-Minister Marcelo Mena Carrasco (Chile), opened the session by emphasising the importance of investment in water security for addressing water scarcity, flooding, water quality and meeting environmental objectives. Mr. Herman Borst(Director of the Dutch Delta Programme, The Netherlands), the lead speaker, shared the ingredients for success for financing water security in the Netherlands, which include leadership and long-term funding supported by the Delta Act.

In the discussion that followed, Ministers emphasised that investments in water security are multifaceted, pursuing multiple policy objectives and needed to be funded by multiple sources. Hence, there is a need to secure funding from all of the beneficiaries of investments in water security. At the same time, Ministers recognised that investments in related sectors, such as urban development, can increase vulnerability to water risks. Some Ministers noted that the business case for investing in water security is often not clear. Nor is the political case always clear, which is why there is a need to stress that the cost of inaction outweighs cost of investment. Ministers highlighted the need for the right mix of economic instruments (taxes, water pricing, public funding), which can leverage private investment. In public funding situations, such as for environmental objectives, there is often a funding gap and it can be very hard to get private sector involved, especially where there are no market instruments in place. In addition, the roles of different parties in a public-private partnership need to be clear, which will be influenced by the specific country context.

Many Ministers recognised that there are a number of barriers to investment in water security that need to be overcome, including the willingness of consumers to pay and willingness of governments to charge, along with a perception that more stringent regulations lead to higher costs. There is also a lack of business models to attract private funding, a lack of bankable projects due to fragmentation and the small size of many projects, and a lack of appropriate institutions. Financial instruments are often not designed to handle transboundary issues.

Finally, Ministers also discussed how the role of public participation in new infrastructure is becoming increasingly important. They noted that role of governance is critical and there is a need to pay attention to co-benefits of investments, such as ecosystems services. In conclusion, they highlighted that political awareness of the need for investment and a long-term perspective are prerequisites for water security investment.

Ministers encouraged the OECD to continue its work on water investment financing, particularly bringing the water and finance sectors together to identify solutions to the water financing challenge.

Urban Water Pollution

The Facilitator, Vice-Minister Marcelo Mena Carrasco (Chile), opened the session by emphasising the importance of water quality management in achieving sustainable development and water security. The lead speaker, Ms. Celia Blauel (Deputy Mayor of Paris) outlined the urban water quality challenges in Paris, which include groundwater and surface water contamination due to pesticides, sewage overflows, and other contaminants with the subsequent risk to public drinking sources. She stressed the goal of achieving water quality suitable for swimming in the River Seine, and the effects of water quantity on water quality, including climate change impacts.

In the discussion that followed, Ministers described their key urban water quality challenges, including contaminants of emerging concern in wastewater discharges, pollution of water sources from agricultural activities, and sludge management. These challenges are exacerbated by the lack of long-term funding for infrastructure, including capital costs and operation and maintenance, and the impacts of climate change.

Ministers shared their experience with addressing these challenges and acknowledged the role of urban and land use planning, in co-operation with central and local government and urban and rural stakeholders, to manage water quality and adapt to climate change. The use of the Polluter Pays Principle was recognised as a critical tool for not only funding water quality improvements but also for changing users' behaviour in order to prevent pollution. Ministers stressed the economic and environmental benefits of pollution prevention over remediation. Many Ministers expressed a

preference for nature-based solutions that bring multiple benefits in terms of enhanced water quality, increased resilience to drought and floods, and improved biodiversity.

Ministers discussed ways forward to effectively manage contaminants of emerging concern. Opportunities exist for raising awareness, data sharing, and prioritising contaminants on a 'watch list' to inform new legislation. Guidance on the development of monitoring methodologies and policy instruments to reduce contaminants before they enter the water system (for example through targeted use of the Polluter Pays Principle) is required.

Resource Efficiency and the Transition Towards the Circular Economy

The Chair of the session, Minister Nick Smith (New Zealand), opened the session by emphasising the importance of learning from different country experiences in order to move towards a more circular economy. Mr. Hans Stegeman (Rabobank), the first lead speaker, provided a high level overview of the characteristics and likely macroeconomic impacts of a more circular economy. The second lead speaker, Mr. Michael Warhurst (CHEM Trust, UK), spoke about circularity in the context of plastics and highlighted the potential barriers to increased circularity posed by hazardous substances. Four short presentations were also made by representatives of the private sector (Electrolux, IKEA, Umicore, and Rolls Royce).

The speakers highlighted the key characteristics and macroeconomic impacts of a more circular economy, as well as noting the importance of new business models and the barriers to increasing their take-up in the circular economy. Circular business models, where firms generate economic value by undertaking business activities which close material loops, will become increasingly attractive. More liquid waste markets will create opportunities for recycling firms while extended product lifetimes will require an expanded repair and remanufacture sector. Several speakers pointed to existing modelling which highlights the potential macroeconomic benefits of a more circular economy. It is clear that a more circular economy will lead to significant structural change in the economy and the trade-offs associated with increased circularity need to be better understood in order to accompany the transition with flanking policies.

Ministers noted the barriers to a more circular economy and underscored the importance of taking an integrated approach to analysing the issues involved in moving to a more circular economy. Issues such as the barriers created by the presence of hazardous substances in certain consumer goods, the feedstock quality for recycled materials relative to their virgin material, secondary material supply shortages as a constraint to expanded production, the creation of scale efficiencies in production, and existing regulations in the sphere of chemical and waste management as well as trade.

Ministers noted that there are potential gains to a policy emphasis on particular products and sectors, with food, plastics, construction, and electronic waste appearing to be the priority waste streams for many countries. Some of the key policy measures identified to move forward included: expanded green public procurement; mainstreaming the circular economy into financial mechanisms; strengthening downstream policies while developing new polices upstream such as product design; and finding better ways of encouraging green consumer behaviour.

More generally, Ministers emphasised the importance of an integrated national level policy approach. In the end, the road to a circular economy will be challenging; we will benefit from a continued

exchange of ideas and experience in this area. It was noted that the OECD could help by providing a platform for the exchange of best practices, including on how to better align policies across different ministries, and providing policy guidance on specific aspects of the circular economy, particularly relating to product design and green financing, as well as to the policies that would facilitate increased uptake of circular business models. OECD analysis could also help to better understand macroeconomic impacts of the circular economy and the trade-offs involved in this transition, and the impact that increasingly global value chains can play in promoting material circularity, and the policies that can contribute to this process.

ENVIRONMENT MINISTERIAL MEETING

28-29 September 2016

OECD Conference Centre, Paris

OECD iLibrary

As an event participant, we are offering you two months free access to **OECD iLibrary (www.oecd-ilibrary.org)** when using the codes below:

USERNAME: env-ministerial PASSWORD: env-ministerial

For more permanent access, please visit www.oecd-ilibrary.org/about or contact us at oecdilibrary@oecd.org



