



Observatoire  
de la Politique  
Climatique

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Abstract

# PREFACE: The time to act is now! A message to the new Government for the 2023-28 legislature

In October 2021, the Government of the Grand Duchy of Luxembourg – more precisely the Government in Council – nominated the members of the “Climate Policy Observatory” (“Observatoire de la Politique Climatique”, OPC), which was set up in accordance with Article 7 of Luxembourg’s national climate law. The Observatory may issue opinions on its own initiative.

*“The OPC’s mission encompasses advising on projects, actions or measures that may have an impact on climate policy; scientifically evaluating the measures carried out or envisaged in the field of climate policy and to analyse their effectiveness, as well as to propose new measures; to write an annual report for the Government on the implementation of the climate policy; and to propose research and studies in relevant fields.”*

The OPC is a scientific council currently composed of seven members chosen from individuals with expertise in a field directly related to the Observatory's mandate. Further selection criteria include the complementarity of expertise across relevant fields of knowledge, and gender diversity. Fields of expertise of the actual members range from climate modelling, climate economics and climate finance, economic geography and political science, multicriteria analysis and life-cycle assessment, biochemistry, and system science. Four of the members are based in Luxembourg, with the other three members based abroad. For more details on the experts see Annex I. The members are appointed to serve for 5 years in addition to their main employment elsewhere and dispose of an annual budget from the State budget.

The OPC's mission is supported by a Secretariat, made up of two highly qualified experts in greenhouse gas (GHG) projections, climate policies, and environmental regulation. The Ministry of the Environment, Climate and Sustainable Development hosts the Secretariat. The Bureau of the OPC comprises the President, the Vice-President, and the Secretariat.

The OPC aims to make a meaningful contribution to informing climate change policy and practice in a scientifically sound and effective way. Given the urgency of the situation, it is a shared priority of all its members to identify leverage points to bring about the most far-reaching and rapid changes possible. The OPC believes that its open legal remit and the diversity of expertise and experience of its members give it unique strengths that enable it to add value in areas that are particularly difficult to address from a single ministry or organisation perspective. The OPC is particularly well placed to respond to the assessment of the Intergovernmental Panel on Climate Change (IPCC) stating that "climate governance is most effective when it interacts across multiple policy domains, helps establish synergies and minimize trade-offs", as well as connecting different actors across sectors and governance levels (national, municipal, level of individual actors). Moreover, the IPCC points out that effective governance will rely on the empowerment of diverse actors to engage in making profound changes to prevailing ways of thinking and acting.

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# The climate urgency: What's at stake for Luxembourg



## Integrated National Energy and Climate Plan (PNEC)

As news of extreme weather events all around the world continue to pour in, it is clear that the damaging effects of climate change through floods, droughts, and heatwaves have begun. This is one of the main findings of the IPCC, which published the synthesis report of its 6th Assessment Report (AR6) in March of this year, summarising the research of its working groups on the physical science basis of climate change, impacts, adaptation and vulnerability and mitigation of climate change. Another of the IPCC's main findings is that while efforts to curb GHG emissions across the world grow, the concentration of GHG emissions in the atmosphere is still increasing. Moreover, impacts of climate change accelerate other processes of environmental degradation, including the mass extinction of species, undermining ecosystem services that our economy, society, and all other life forms depend on.

Upon release of the “Climate Change 2023: Synthesis Report” (Synthesis Report), the United Nations Secretary General, António Guterres, stated that

“the climate time bomb is ticking” and that the “1.5°C limit is achievable, but it will take a quantum leap in climate action”.<sup>1</sup>

Like Guterres, the Luxembourg Climate Policy Observatory (“Observatoire de la Politique Climatique”, OPC) views the Synthesis Report as a “clarion call to massively fast-track climate efforts by every country and every sector.”

It is against this backdrop that the OPC reflects on the past year and calls on the Luxembourg Government for the next legislative period 2023-28 to take all necessary measures for the urgent and just transition to net zero.

The OPC stands by the main principles it put forth in last year's annual report: (1) to reduce the dependence on fossil fuels; (2) to implement a just transition towards a climate-resilient development; and (3) to bring about a new and transformative governance that makes ambitious climate action possible.

Since the OPC published its [2022 annual report](#), the Government of Luxembourg has made important advances in the area of climate change mitigation. On 21 July 2023, the Government council adopted the draft update of the Integrated National Energy and Climate Plan (“Plan national intégré en matière d'énergie et de climat”, PNEC), and transmitted it the same day to the European Commission.

While the OPC applauded many of the 201 measures presented in the draft updated PNEC, the OPC highlighted several issues with the measures in terms of scope and ambition, coherence, and feasibility of the path for implementation. The OPC's statement on the draft PNEC update can be found [online](#), and the highlights are presented in Annex 2 of this report.



<sup>1</sup> UN Secretary General. 2023. Secretary-General's video message for press conference to launch the Synthesis Report of the Intergovernmental Panel on Climate Change.

<https://www.un.org/sg/en/content/sg/statement/2023-03-20/secretary-generals-video-message-for-press-conference-launch-the-synthesis-report-of-the-intergovernmental-panel-climate-change>

## Policy recommendations for the incoming Government for the legislative period 2023-28

It is on the basis of the OPC's main principles elaborated in the 2022 annual report and its advice on the PNEC, that the OPC lays out in this report its recommendations for a science- and evidence-based approach to the coalition agreement and the Government's plan for the legislative period 2023-28.

Without transformative climate action in this legislative period, Luxembourg will fail to reach the national goals of the 2020 climate law and the EU goals for 2030 and 2050. In the view of the OPC, the Government has the opportunity to implement concrete changes in governance structures and policy action to ensure appropriate, science- and evidence-based climate action as called for by the IPCC. Luxembourg faces certain impacts of climate change in a setting of increasing volatility, uncertainty, complexity and ambiguity with regards to the economy, technological change and the functioning of society at large. **In Chapter 1 on "Governance and policy action for climate resilient development"** the OPC sets out its recommendations on how to create an enabling environment for climate resilient development in a turbulent world in Luxembourg and beyond.

Luxembourg's financial centre represents both a risk and an opportunity for Luxembourg when it comes to climate action. Without structural change and fundamental reorientation to finance for sustainable development, and in particular climate change mitigation and adaptation, the main pillar of Luxembourg's economy remains vulnerable to climate change risks: investment in fossil fuels and other stranded assets are not sustainable in the long or even medium term and jeopardise future economic stability.

The size of the Luxembourg finance sector represents a risk to the Luxembourg economy if this reorientation does not take place. But the size of the finance sector also represents an opportunity for Luxembourg to have a significant impact on climate action both nationally and abroad. The OPC invites the new Government to consider this opportunity for Luxembourg, since only if the finance sector is truly sustainable can Luxembourg prosper.

**In Chapter 2 on "Finance for climate resilience"**, the OPC outlines recommendations for the finance sector, emphasizing that a re-orientation of the finance sector is necessary both for the health of the Luxembourg economy and for the health of the planet. It is through the strength of its finance sector that Luxembourg can effect global change.

## Concrete Actions for the new Government for the 2023-28 legislative period

Based on its analysis, the OPC makes the following recommendations to the Government, and proposes concrete, evidence-based actions that are informed by the latest science, to be included in the coalition agreement and the Government's plan during the 2023-28 legislative period. A more detailed explanation and reasoning behind each of the recommendations can be found in the main report.



## Governance and Policy Actions

### Goal 1. Better structures and procedures for linking policy development and implementation across different policy areas, administrative levels and stakeholder groups

Climate resilient development gives equal weight to cutting carbon emissions for mitigation, and ensuring preparedness for crises for adaptation to climate change. This will require improving existing, and establishing new structures and procedures for better connecting policy development and implementation across different policy areas, administrative levels and stakeholder groups. The goal is a greater number of more effective collaborations between actors across different governance levels that are fully focused on empowering local actors to implement place-appropriate local actions for climate resilient development.

#### Towards greater policy coherence:

1. Establish the function of a “Climate Envoy” attached directly to the Prime Minister in the State Ministry.

#### Towards better connections across governance levels:

2. Reinststate the Klimabiergerrot (KBR) with a new remit.
3. Orient the “Klimapakt” and “Naturpakt” towards implementation.

#### Procedural improvements of existing structures to enhance transparency and predictability:

4. Simplify and make processes more transparent for the Climate and Energy Fund (“Fonds Climat Énergie”) and create a dedicated funding category for creative/seed projects.
5. Create an administration for climate- and meteorology-related data and information.

#### Policy support for collaborative structures and action:

6. Put in place legal frameworks and subsidy schemes for targeted investments in collectively-used infrastructures and technologies rather than mainly subsidising individual households.
7. Support the creation of cooperative ventures and enterprises aimed at social impacts (“Sociétés d’impact sociétal”) for greater diversity of economic actors in particular in the food, energy, and water sectors.

#### Capacity building through an expanded offer of training for civil servants and lifelong learning opportunities for other stakeholders:

8. Provide training on the basics of climate science, climate action and future-oriented systems thinking for Government officials as part of the “tronc commun” training track.
9. Organise regular capacity building workshops for and with stakeholders.
10. Integrate climate science, carbon footprint, and decarbonisation pathways into the school curriculum, including the necessary training for teachers.



## Goal 2. Design policies for regenerative, transformative and future-oriented actions for climate resilience

There can be region-specific interference between energy system transitions and water and food security, or environmental health. In integrated approaches, land use, associated ecosystems and social systems are designed to be multifunctional to contribute to ecosystem health AND human health in the face of accelerating climate change.

### Adopt routine procedures to eliminate non-sustainable, and to promote future-fit approaches:

**11.** Expand the sustainability check of new laws (“Nohaltegekeetscheck”) to all policies (not just laws), including those relating to climate change mitigation and adaptation, to enable a systemic sustainability and feasibility assessment of measures.

### Design policies for place-based experimentation with integrated approaches:

**12.** Identify and make suitable land accessible for local actors to implement climate actions, including for the regeneration of ecosystems.

**13.** Enable experimentation, in particular to promote carbon sequestration and ecosystem health.

### Empower and engage diverse actors for effecting long-term changes and learning on the ground:

**14.** Create and encourage new award programmes for climate resilient development in the private sector and for residents.

**15.** In addition to the Climate and Energy Fund, develop other more diversified sources of income and resources for engagement in long-term adaptation and mitigation.

**16.** Institute means to enable public service by private individuals, including for climate action.

## Goal 3. Improve the evidence base for policy through well-connected monitoring and action-oriented learning

A final set of recommendations aims at improving the evidence and knowledge base for policies and local action through well-networked monitoring, evaluation, and action-based learning.

### Monitoring and learning for more effective climate action:

**17.** Create and support expansion of existing collaborative internet platforms for sharing initiatives and results of accompanying research. This will rely on participatory research approaches that make a combination of expert driven research, official monitoring and citizen science for impact assessments and long-term monitoring of climate actions publicly accessible.

**18.** Improve indicators to measure and monitor lifecycle GHG emissions across all sectors, biodiversity impacts, ecosystem services and associated payment for ecosystem services schemes, and wellbeing.

**19.** Establish an Institute for Climate Resilient Development in Luxembourg to 1) develop capacity building programs, 2) co-design and host internet platforms and networks for climate action and 3) coordinate participatory monitoring and transdisciplinary action research.



## Finance for Climate Resilience

### Goal 1. Implement a strategy for the entire financial centre

The current sustainability strategy of Luxembourg's financial centre lacks concrete, integrative actions, as well as credibility due to lack of enforcement. The OPC recommends adopting a proactive strategy that directs finance to the implementation of effective mitigation and adaptation measures, that is critical of and aims to go beyond Environmental, social and corporate governance (ESG) criteria.

**20.** Develop and implement an update to the sustainable finance strategy that addresses all parts of the financial centre, prevents greenwashing, and greatly speeds up the transition to net zero.

**21.** Introduce the sustainability strategy for Luxembourg's entire financial centre, including disclosure of domestic and foreign, direct and indirect carbon footprints.

### Goal 2. Foster capacity building and dialogue

Throughout Luxembourg's financial centre there are gaps in the capacity, capability, and expertise to adequately address and take into account the climate and sustainability dimensions. Next to education and training, a campaign to foster dialogue across different sectors and stakeholder groups would help increase capacity and prevent silo-thinking.

**22.** Develop capacity and capability building in the financial sector on climate and environmental challenges their interconnected scientific, technical and socio-economic dimensions, and their relation to alternative financing approaches (going beyond ESG).

**23.** Launch a comprehensive campaign to foster dialogue across different sectors and stakeholder groups in Luxembourg to agree on a common understanding of sustainability and to prevent piecemeal or silo-thinking.

### Goal 3. Develop climate-change related risk standards

Continue the pioneering work started for system relevant banks and develop new climate-change related risk standards (transition risks, physical risks, and economic risks) for all commercial banks in Luxembourg. These new standards help identify and reduce climate-related – and thus economic – risks and contribute to making commercial banks more climate-resilient.

**24.** Promote sustainable banking through highest-quality risk-standard formulation and enforcement for all banks.

**25.** Continue following the sustainable banking pathway and encourage all stakeholders to buy in.

**26.** Set up a science-based, open access spatial data and analysis infrastructure to support all Luxembourg based financial institutions to monitor climate-related risks.

### Goal 4. Make “finance made in Luxembourg” a brand for true sustainable finance and banking

Luxembourg should grasp the opportunity to become an international leader for true sustainable finance (beyond the EU taxonomy). Its financial centre must bundle its long-standing, unique financial expertise to innovate.

**27.** Further support the innovative structuring of blended climate-finance abroad and at home.

**28.** Monitor investments of Luxembourg's pension fund (FDC) in corporations' projects and activities for accountability.

**29.** Create transparent and credible ways to achieve accountability.

**30.** Invest in Luxembourg's and the world's just transition and apply the same sustainability principles.

**31.** Align lobbying and advocacy towards achieving net-zero.



Main principles for a rapid  
and just transformation  
towards a sustainable  
and decarbonised society



In its 2022 annual report, the OPC put forth its main principles for a rapid and just transformation of Luxembourg to a sustainable and decarbonised society. As the new Government forges a coalition agreement and plans for the 2023-28 legislative period, the OPC urges adherence to these main principles (Figure 1.1).

### transformation towards a sustainable and low-carbon society

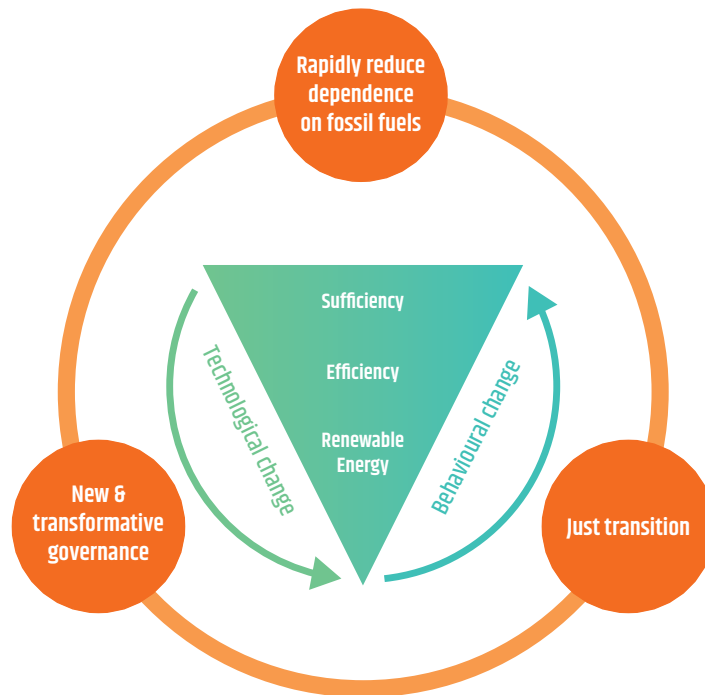


Figure 1: Main principles for a transformation to a sustainable and decarbonised society

## Sectoral recommendations:

### Buildings



- Reduce ambient temperature in homes and offices
- Reduce floor area per person
- Promote resilient buildings
- Require landlords to invest in renovations of leased homes or apartments
- Ban fossil heating systems

### Transport



- Land use and urban planning to reduce space for cars
- Develop plans for a 15-minute city
- Promote working from home
- Incentivise the modal shift from a car-centric to a shared, soft mobility system
- Increase share of electric vehicles (EV) and ban fossil fuel vehicles

### Energy Systems



- Increase the capacity of renewable energy production and thereby decrease the dependency on imports from foreign markets
- Continue and strengthen the measures in place aiming for a reduction of final energy demand
- Stop direct/indirect subsidies to fossil energy
- Increase the share of renewable power production

### Food, Agriculture and Forestry



- Shift to balanced, sustainable healthy diets
- Reduce food loss and food waste
- Reduce methane and nitrous oxide emissions in agriculture
- Minimise dependency on production-related inputs
- Increase efficiency in extracting valuable resources
- Promote carbon sequestration in healthy and resilient forests
- Promote carbon sequestration on agricultural land in woody structures and soil
- Promote ecosystem restoration, and planting trees in urbanised areas
- Reduce net land take from about 0.5 ha per day to 0 ha per year



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