

INTEGRATING SUSTAINABLE COOLING IN RECOVERY POLICIES FOR A GREENER FUTURE

- **According to the latest UNEP Emissions gap report, we are still heading for a temperature rise above 3°C this century.** Our common challenge is to set and place ourselves on a trajectory in line with the Paris agreement and our objectives to limit global warming to well below 2°C and pursue 1.5°C. **We must make the choice of a green recovery, in line with the objectives of the Paris Agreement and the SDGs.**
- **There are some good signals:** carbon neutrality has become the new horizon (EU, France, Japan and South Korea for 2050 – China by 2060) ; the USA are back in the Paris agreement. The Climate Ambition Summit on December 12th was an important step on the road to an ambitious COP26.
- We must deliver on:
 - **Mitigation** (and translate these carbon neutrality goals into **ambitious NDCs and communicate as soon as possible and by COP26 at the latest**). The Climate Ambition Summit on December 12th, was an important step on the road to an ambitious COP26.
 - **Adaptation**, with the recent Climate Adaptation Summit that put adaptation at the top of the climate agenda. At this occasion, France reiterated its commitment on adaptation (one third of the €6 billion devoted to climate finance)
 - **Finance**
 - **Action agenda**, which is an important pillar of the Paris agreement. Non-state actors have an important role to play in climate action.
- The recovery offers us a unique opportunity to “build back greener” and transition to decarbonised economy.
- The **French recovery plan includes 30 billion euros that are exclusively dedicated to green transition.**
- As buildings representing 25% of the French total emissions, 6.7 billion euros of the recovery plan are dedicated to buildings energy renovation, which reduces heating and cooling needs. Several support schemes have been put in place to **support energy renovation**, some of them have been boosted by the recovery plan, particularly for the low-income households.
- The recovery package also supports the renovation of the commercial premises of VSEs and SMEs, with tax credits: for French overseas territories where the climate is hotter, the installation of **high-performance air-conditioning and solar protections** are supported (it can cover up to 30% of the eligible expenditure and up to 25,000€ per company).
- **France is taking a leadership role in demonstrating how to integrate climate ambition and cooling action.** Raising awareness and improving collaboration on sustainable cooling have been a French priority for a few years, including during the G7 Presidency in 2019, with the launch of the **Biarritz Pledge** for fast action on efficient cooling and the **Efficient Cooling Initiative** under the CCAC.
- As **delivering zero-carbon buildings is a priority** and should go hand in hand with sustainable cooling, France has been deeply involved in the **Global Alliance for Buildings and Construction** since COP21. This alliance gathers 30 countries and 100 organizations committed to fostering decarbonisation and resilience of the real estate sector. It has produced both global and regional roadmaps, meant to help policy makers and companies to design their building and climate strategies.



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- There has been a **wide call for governments to keep sight of the climate crisis**, and to use Covid-19 recovery plans as an opportunity to build back better.
- There are different phases of response: the **1st phase of response focuses on stabilization**, the **2nd phase stimulus measures shift to rebooting economies**. Long-term structural recovery plans follow. As we move through these phases of the crisis, the openness to consider climate increases.
- However, to achieve long-term sustainability goals and our Paris targets, **our immediate response must set the foundations and path for net zero. What we do now will greatly influence the trajectory of the next decade and beyond.**
- In the Spring of 2020, the World Bank outlined a **sustainability checklist** as a broad guide for governments and policymakers as they develop recovery plans. In the short-term, considerations include: job creation, boost to economic activity, timeliness and risk. Long term considerations include: growth potential, resilience to future shocks, decarbonization and sustainable growth trajectory.
- **Considering the key concerns of policy makers— protecting jobs, stimulating demand, and growing attention on cold chains for resilient food and health systems – sustainable cooling is a strong contributor to a green recovery.**
- E3G in partnership with K-CEP used the checklist to **identify 6 high impact opportunities to reduce emissions by integrating efficient, climate-friendly cooling in stimulus packages**. The conversation has been taken forward with today's launch of the **Sustainable Cooling in Support of a Resilient and Climate Proof Recovery Brief**.
- The brief presents how governments can actively reorient public policy and include cooling in their recovery packages to spur economic recovery, create and protect jobs for vulnerable population groups, and help strengthen resilience, while accelerating the transition to efficient, climate-friendly cooling technologies and solutions.
- Building off the six high impact opportunities, the brief gathers concrete examples of countries, cities, companies, and organizations investing in sustainable cooling as part of green recovery .
- The first high impact opportunity where efficient, climate-friendly cooling can generate jobs, raise economic output, and reduce emissions is in the **buildings sector**. The buildings sector is at the forefront of economic recovery plans and is a priority for climate action, as it produces 40% of global emissions.
- Shovel ready actions include large scale retrofits for better thermal insulation, inclusion of passive cooling and ventilation solutions, and replacement of inefficient cooling equipment. Governments can offer incentives and rebates to seize the opportunity presented during lockdowns for retrofitting offices, schools, city halls and community centers.



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- **On appliances**, governments have an opportunity to set ambitious long-term goals for cooling equipment efficiency and refrigerant transition through recovery packages. This includes introduction or tightening of MEPS with implementation accelerated by incentive policies for consumers. Countries can also shape conditional bailouts for hard-hit sectors that support sustainable cooling including supporting manufacturers with ambitious decarbonisation plans.
- **Urban environments** are hard hit by consequences of both global warming and Covid-19 crisis. Expanding urban greenery is a shovel ready opportunity to reduce the urban heat island effect while also reducing air pollution and quickly creating jobs. Low-cost and shovel-ready investment opportunity are high albedo or 'cool' roofs and pavements. Changing a fifth of a city's roofs and half of the pavements to 'cool' versions could lead to cost savings 12 times the cost of installation and maintenance.
- Strengthening **cold chains** must be a priority to ensure delivery of the COVID-19 vaccine and other medical supplies, as well as reducing food loss and strengthening food security. Governments can support start-ups with innovative business models for cooling provision to vulnerable communities, and can also tap into new **financing opportunities**, including the World Bank's commitment to US\$18 billion to finance purchase and distribution of COVID-19 vaccines, including cold chain infrastructure.
- **R&D** - Stimulus packages can champion development and early deployment of innovations such as passive cooling designs, hyper-efficient cooling technologies, novel refrigerants, renewable and off-grid cooling solutions, and nature-based cooling.
- **Finance** - across all these sectors there is a unique window of opportunity to tap into fiscal planning and new financing models to accelerate the transition and increase access to sustainable cooling.
- **Climate-friendly and efficient cooling provides a massive opportunity to put us on a path to Build Back Greener. Well-planned and designed stimulus and recovery packages can accelerate the transition to sustainable cooling for all, but these efforts cannot stop with recovery packages.**
- **Long term-planning is needed**, including holistic cooling assessments and policy mapping through National Cooling Action Plans, the development of deep decarbonization strategies and structural technology investments, such as district cooling networks and efficient and renewable energy systems, and the set-up of effective policy standards and market transformation mechanisms.



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- Investment in sustainable programs is more successful in terms of environmental and economic outcomes than business as usual stimulus packages.
- **Cooling should be looked at as public infrastructure:** while acting on appliances and buildings is fundamental, the first step for sustainable cooling action should be to seek ways to avoid cooling needs, including through effective **urban design**.
- Action on **cold chains** should look well beyond the quick roll out of vaccines, and should create the conditions for the same infrastructure to be used for strengthening rural resilience and food systems through **integrated and sustainable approaches**.
- Accelerating action on **National Cooling Action Plans** and supporting policies, such as MEPS and labels, in partnership with industry and linking these to NDCs will be fundamental to drive action. Investing in **innovation** for cooling is also a priority, if we are serious about getting on a pathway to net-zero emissions in cooling.
- Additional finance needs to be made available for countries to speed up action on cooling efficiency, along with HFC phasedown (with the MLF), including through “green cooling bonds”.

- Decarbonization of heating and cooling is one of the top priorities of the **European Green Deal**, since the energy required to heat and cool value chains and buildings constitutes a great share of EU energy use, and since cooling needs are increasing. The goal is to make sure that cooling is a solution rather than part of the problem.
- In this framework, **EU members have until the end of 2024 to use more than 600 billion euros** of financing of which **thirty percent needs to be climate mainstreamed**.
- The EU has put in place a number of financing and technical support mechanisms for **renovating and retrofitting the buildings stock**. However, while it is a major part of the ongoing EU recovery plan, this plan cannot be completed within a few years and needs to be carried out through a long-term strategies, at both EU and national levels.
- Also relevant is the Renewable Energy Directive which is set to be revised this summer and the Ecodesign Directive that will ban worst performing appliances from the market. Additionally, EU member states are asked to conduct comprehensive assessments for heating and cooling to ensure granular understanding of decarbonisation opportunities along the cooling value chain.

- Action on cooling should focus on reducing risks for people, especially in developing countries. This entails assessing cooling needs and having strategies to address them sustainably in the long-term. In India, the focus is in helping the population **reaching thermal comfort** and increase **access to healthy and nutritious food** without increasing the environmental impacts of cooling, as the purchasing power of people grows, diets change and temperatures rise.
- In this framework, the **India Cooling Action Plan** brought together government, the private sector and civil society organizations to study cooling needs and needed interventions across sectors and based upon many existing policies. This comprehensive and highly successful exercise is at the basis of the upcoming **Cool Coalition NCAP methodology**, which is set to help other countries conduct a similar holistic exercise and plan long-term cooling strategies.



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- In Rwanda, a multitude of initiatives have been developed to contribute to the **implementation of the Montreal Protocol** and its Kigali Amendment, in particular a National cooling strategy,
- These include the implementation of **MEPS and labelling** of refrigerators and room air conditioners, **regional policy integration**, and **awareness campaigns** to encourage communities to buy cleaner technologies.
- **Financing instruments** were put in place with the support of KCEP and U4E to reduce the cost-barriers for buying or replacing cooling equipment with more efficient options. These include on-bill and on-wage financing options and concessional loans developed with the support of local banks.
- Moreover, the **African Centre of Excellence for Sustainable Cooling and Cold Chains**, supported by the UK and the University of Birmingham, has started working to study and demonstrate which technologies work for Rwanda and neighbouring countries, which technologies are cleaner and which technologies bring added value for recovery strategies that are in line with climate imperatives, and to reduce the impacts of the pandemic.

- Cooling action needs to prioritise the reduction of heat stress and of the growing phenomenon of **urban heat islands**. This is the result of the reduction of natural components in built communities and the consequent deterioration of environmental quality. **Healthier, cooler cities can be built by taking inspiration from nature**.
- Tailored local interventions, such as **integrating green in urban environments**, effective landscape architecture for public spaces, and the consolidation of ecological connectivity can reduce a city's temperature by 3 degrees while increasing air quality and providing biodiversity benefits
- The effectiveness of Nature Based Solutions for cooling has been clearly demonstrated by the Green Corridors projects in the City of Medellin.
- This kind of intervention needs to be followed by **passive building designs**, including ventilation, insulation, hybrid technologies, and designs that take advantage of local natural topographies, to further reduce the need for mechanical cooling.

- In summary, for an effective and resilient green recovery, integrated approaches across sectors are needed to avoid cooling needs, shift to more sustainable solutions and energy sources, improve existing designs and protect the most vulnerable from heat risks and lack of cooling access.
- Beyond the immediate recovery needs, governments have to roll out **structural and systematic solutions**, develop **deep decarbonization strategies**, implement effective **policy standards and market transformation mechanisms**, adding cooling to NDCs and climate strategies, all aligned with the pathway to zero emissions for cooling.
- For this to happen at a global scale, **international cooperation remains fundamental** to enable solidarity and understanding of needs, and to share solutions across countries, disciplines and sectors. The **Cool Coalition** and the **CCAC's Efficient Cooling Initiative** are platforms that help stakeholders do just that.

