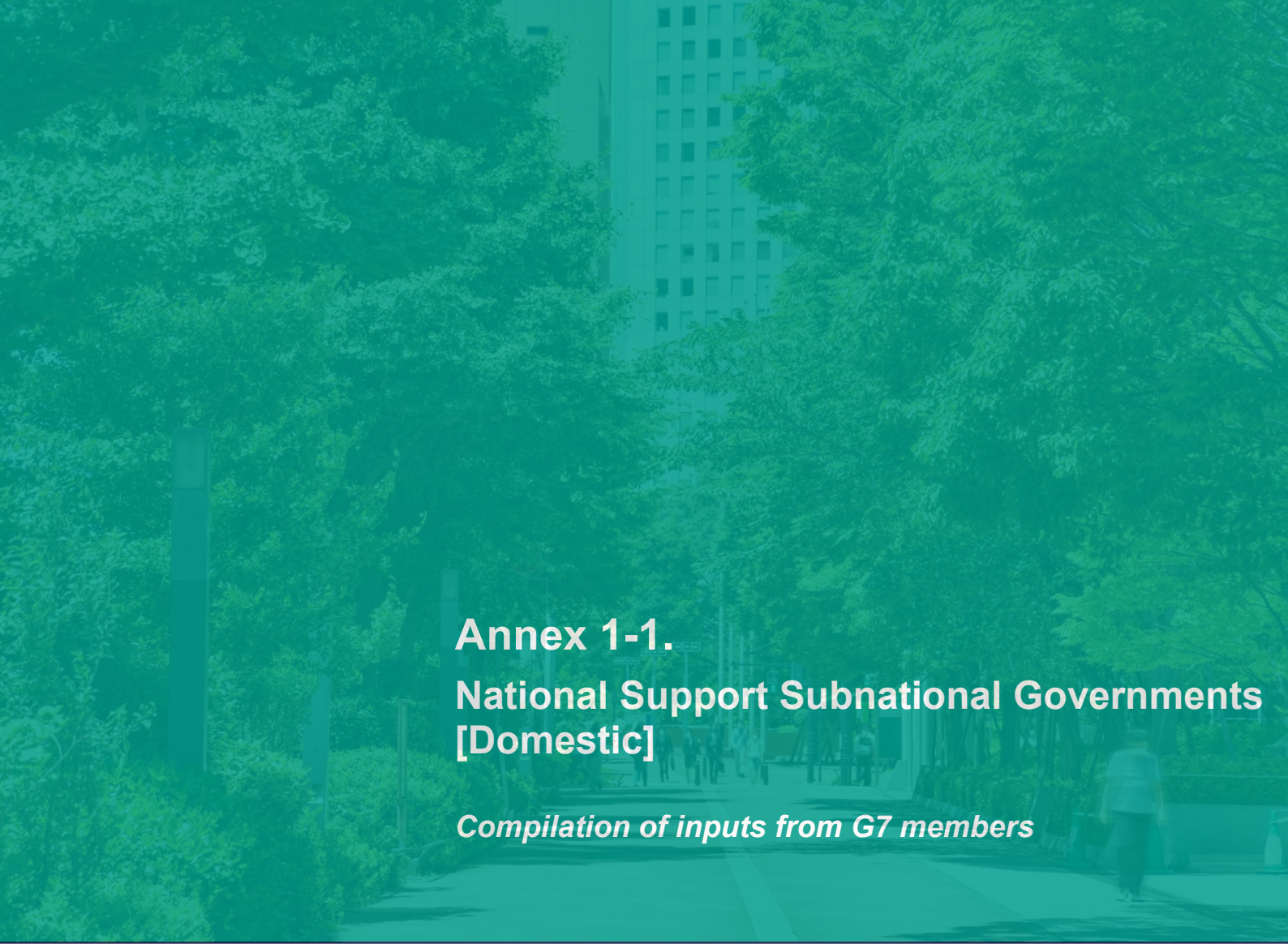




Annex 1-1.

National Support Subnational Governments [Domestic]

Compilation of inputs from G7 members

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This Annex is a compilation of information provided by G7 members on policies, measures, and actions related to subnational climate action taken by national governments. The policies, measures, and actions listed here are part of national actions to support and encourage subnational actions. They are not an exhaustive list of policies and measures in each country.

The policies, measures, and actions are grouped into seven categories. Some measures belong to more than one category. They are either included in the closest category or reclassified. Definitions of each category are given on the last page of this Annex.

1. Policy Framework

FRANCE

Regional energy committees

The targets of renewable energy for each region will be defined by the central government. Each regional committee will be consulted to take account of specific regional features.

GERMANY

The Federal Climate Protection Act (KSG)

The Federal Climate Protection Act (KSG) establishes a comprehensive framework for monitoring greenhouse gas emissions, both overall and in the individual sectors. The emissions data are reviewed by an expert council consisting of distinguished scientists. If the data indicate that emissions exceed the reduction targets of the KSG, the Federal Government must adopt measures to meet these in the future. In addition, the Federal Government regularly adopts a climate protection program in which it sets out how it intends to achieve its climate protection targets. On an annual basis, the Federal Government prepares a climate protection report that includes the development of greenhouse gas emissions in the various sectors and overall, the status of implementation of the climate protection programs and a projection of the expected greenhouse gas reduction effects.

JAPAN

Act on Promotion of Global Warming Countermeasures and Local Government Action Plan

Based on Article 21 of the Act on Promotion of Global Warming Countermeasures, subnational governments are required to formulate **Local Government Action Plan (LGAP)** in line with the National Plan for Global Warming Countermeasures. LGAP consists of two parts: municipal operational part and jurisdiction part. The revision of the Act introduced

the system to create areas to promote global warming countermeasures (the Promotion Area) in 2022. Municipalities can establish the promotion areas for renewable energy through discussions with local communities. In promotion areas, municipalities can authorize renewable energy projects, and these projects are eligible for some incentives. As of August 2023, 12 municipalities and towns were designated the promotion areas.

Climate Change Adaptation Act

The Climate Change Adaptation Act requires prefectural and municipal governments including government ordinance-designated cities to strive to (1) formulate Local Climate Change Adaptation Plans and (2) establish Local Climate Change Adaptation Centers. The Ministry of the Environment, in collaboration with the National Institute for Environmental Studies, supports the subnational government to plan and implement local activities by publishing manuals, dispatching specialists, and collecting/providing information on the impact and adaptation of climate change. The government also proposes a bill to the national parliament to encourage actions against heat illness by municipal governments. As of August 2023, a total of 236 subnational governments have developed their local adaptation plan. These include 47 prefectures, 19 ordinance-designated cities, and 170 municipalities. As for the local climate change adaptation center, 60 subnational governments (41 prefectures, 3 ordinance-designated cities, and 16 municipalities) have established the local climate adaptation center as of August 2023.

UK

The Net Zero Strategy and Net Zero Growth Plan

The UK Government is working closely across all levels of government and with Devolved Administrations in Wales, Scotland, and Northern Ireland to reduce emissions and deliver net zero, as set out in The Net Zero Strategy and the Net Zero Growth Plan.

<https://www.gov.uk/government/publications/net-zero-strategy>

Devolution Deals

Six devolution deals have been negotiated since August 2022 which contain shared agreements in relation to net zero/climate adaptation and/or clean energy in York and North Yorkshire, the North East, Norfolk, Suffolk, East Midlands and Cornwall. We will pilot a devolved approach to buildings' retrofit from 2025 in the trailblazer 'deeper devolution' deals with Greater Manchester Combined Authority and West Midlands Combined Authority.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1147457/powering-up-britain-net-zero-growth-plan.pdf

Good practice

The UK Government agreed two 'trailblazing' deeper devolution deals with the existing Greater Manchester and West Midlands Combined Authorities. These deals enhance the ability of the Combined Authorities to co-ordinate and locally tailor policy interventions. This includes the piloting of a devolved approach to building retrofit from 2025.

Local Adaptation Plans

Defra and the Committee on Climate Change collaborated with the Local Government Association and Local Partnerships to develop the **adaptation toolkit**. The toolkit is intended to provide a supportive framework to enable local authorities to develop their risk assessments and adaptation pathways.

The UK government will pilot climate adaptation reporting by local authorities in the fourth round of reporting under the **Adaptation Reporting Power (ARP4)**.

Local Investment in Natural Capital (LINC) Program

The UK government is providing up to £1 million each to 4 local authority areas - Cornwall, West Midlands Combined Authority, Borderlands (Cumbria, Carlisle and Northumberland), and York and North Yorkshire. The LINC Program will enable an integrated approach to place-based nature recovery needs and provide investment for local climate adaptation plans and ambitions. Funding will support the aim to build lasting capacity and capability to attract longer term private investment at scale.

US

The US Inflation Reduction Act (IRA)

The Inflation Reduction Act is a transformative law that is helping the United States meet its climate goals and strengthen energy security, investing in America to create good-paying jobs, reducing energy and healthcare costs for families, and making the tax code fairer.

One hundred seventy thousand jobs are estimated to have been already created by the IRA; companies have announced over USD110 billion in clean energy investment, including more than USD70 billion in EV supply chain and USD10 billion in solar manufacturing; The Department of Energy estimates that "the clean energy provisions of the Inflation Reduction Act of 2022 and the Bipartisan Infrastructure Law of 2021 together could reduce emissions by approximately 1,000 million metric tons (MMT CO₂e) in 2030, or about a gigaton. Considering the other climate and energy provisions of these laws brings the total to nearly 1,150 MMT CO₂e.

<https://www.whitehouse.gov/cleanenergy/inflation-reduction-act-guidebook/>
<https://www.whitehouse.gov/briefing-room/statements-releases/2023/08/16/fact-sheet-one-year-in-president-bidens-inflation-reduction-act-is-driving-historic-climate-action-and-investing-in-america-to-create-good-paying-jobs-and-reduce-costs/>

Good practice

Environmental and Climate Justice Block Grants in the IRA: This example from the Environmental Protection Agency | Office of Environmental Justice and External Civil Rights. To provide grants and technical assistance to community-based non-profit organizations, alone or in certain partnerships, including those with Indian Tribes, to reduce indoor and outdoor air pollution, including greenhouse gases; monitor for pollution; improve community resilience to the impacts of climate change, including extreme heat and wildfire; and build the capacity of disadvantaged communities to engage with state and federal decision-making processes. The grant amount is USD3,000,000,000.

<https://www.epa.gov/system/files/documents/2023-02/Slides%20for%20the%20EPA%20National%20EJ%20Engagement%20Call%20December%202022.pdf>

American Innovation and Manufacturing (AIM) Act

The American Innovation and Manufacturing (AIM) Act authorizes EPA to address HFCs by: phasing down their production and consumption, maximizing reclamation and minimizing releases from equipment, and facilitating the transition to next-generation technologies through sector-based restrictions on HFCs. On September 23, 2021, EPA issued final rule that will phase down the U.S. production and consumption of HFCs by 85% over the next 15 years, as mandated by the AIM Act. A global phasedown of HFCs is expected to avoid up to 0.5°C of global warming by 2100. On November 3, 2022, EPA issued a proposed rule to establish the methodology for allocating HFC production and consumption allowances starting with calendar year 2024 allowances. From 2024 to 2028, HFC production and consumption allowances will be capped at 40% below the baseline (i.e., historic levels).

<https://www.epa.gov/climate-change/climate-change-regulatory-actions-and-initiatives#high>

EU

National Energy and Climate Plans

EU Member States are required to submit so-called “National Energy and Climate Plans” (NECPs) according to the EU Governance Regulation. In that context, the EU Regulation obliges Member States, when preparing their respective NECPs needed to meet their

respective climate and energy objectives for 2030 (and subsequently for 2040 and 2050), to consult and draw on contributions from local and regional authorities (Article 11 of the EU Governance Regulation).

2. Strategy/Plan

CANADA

Pan-Canadian Framework on Clean Growth and Climate Change (PCF)

Established in 2016, the PCF was Canada's first-ever national climate plan developed with the provinces and territories and in consultation with Indigenous Peoples. It includes a pan-Canadian approach for increasing climate resilience pricing carbon pollution, and measures to achieve reductions in all sectors of the economy. The plan provides provinces/territories the flexibility to develop their own policies and programs, supported by federal investments such as the Low Carbon Economy Fund, which supports municipalities, schools, businesses, not-for-profit organizations, Indigenous communities and organizations, and others.

www.canada.ca/en/services/environment/weather/climatechange/pan-canadian-framework.html

Good Practice

Canada's approach to carbon pricing gives provinces and territories flexibility to implement the type of system that makes sense for their circumstances as long as they align with minimum national stringency standards. Where a province or territory does not implement a system that meets the criteria, the federal system applies. All proceeds from the federal system are returned to the jurisdiction of origin. Roughly 90% of federal fuel charge proceeds are returned to households to protect against affordability impacts, and over 8 in 10 households receive more back than they pay due to the fuel charge. In 2021, Canada strengthened the national requirements, engaged intensively on adjustments to provinces and territories' systems and announced in November 2022 where the federal system applies for 2023-2030. Canada will review the stringency criteria by 2026 and reassess all pricing systems to ensure they continue to meet the criteria for the 2027-2030.

www.canada.ca/en/environment-climate-change/services/climate-change/pricing-pollution-how-it-will-work/carbon-pollution-pricing-federal-benchmark-information.html

<https://www.canada.ca/en/environment-climate-change/news/2022/11/the-government-of-canada-strengthens-pollution-pricing-across-the-country.html>

National Adaptation Strategy (NAS)

Canada's first National Adaptation Strategy (NAS), finalized in June 2023, sets direction for whole-of-society efforts to prepare for impacts of climate change. The Strategy was developed with provincial, territorial, and municipal governments, Indigenous Peoples, and other key partners. It aims to better coordinate on-going efforts and investments by different orders of government and various sectors. The Strategy sets long-term goals, medium-term objectives and short-term targets across five interconnected systems of disaster resilience, health and well-being, nature and biodiversity infrastructure, and economy and workers. The Strategy's implementation will be supported through several mechanisms, including bilateral action plans between the federal and provincial/territorial governments, as well as new federal investments to support community-level climate preparedness.

www.canada.ca/national-adaptation-strategy

FRANCE

Territorial decarbonization strategies

Each region and local authority draw up a territorial decarbonization strategy. These strategies have been adopted in the majority of territories. The French government supports the regions and local authorities in drawing up and implementing their local policies, which must all be consistent with the strategies defined at a higher level.

GERMANY

Climate Action Plan 2050

The government's overarching mitigation strategy, which also addresses subnational entities. The Climate Action Program 2030 contains the measures needed to achieve the defined aims for 2030.

<https://www.bmuv.de/en/publication/climate-action-plan-2050-en>

Federal Action Plan on Nature-based Solutions for Climate and Biodiversity

Strengthens ecosystems and unites climate actions and nature conservation on federal and sub-national level.

<https://www.bmuv.de/en/download/federal-action-plan-on-nature-based-solutions-for-climate-and-biodiversity>

ITALY

Regional and Provincial Strategies for Sustainable Development

Since 2018, a series of actions have been activated on the initiative of the Ministry for the Environment and Energy Security (MASE), aimed at building frameworks for public policies

at regional, autonomous province, and metropolitan city levels, in order to achieve the SDGs and provide evidence of the contributions made by policies, plans and programs to the achievement of the National Strategy for Sustainable Development (NSDS) objectives, as well as to define the mechanisms and indicators to guarantee their integrated monitoring. In line with the path outlined by the NSDS at the national level, the objective of the regional processes, therefore does not merely lie in producing a strategic document; it rather consists in creating a long-term vision and activating a series of coordinated and synergic actions, which jointly constitute the regional, provincial, and metropolitan strategies for sustainable development and enable achieving the objectives pursued by the national strategy.

<https://www.mase.gov.it/pagina/strategia-nazionale-lo-sviluppo-sostenibile>

Good Practice

All Italian regions and the autonomous provinces of Trento and Bolzano–Alto Adige are currently working on their own Regional and Provincial Strategies for Sustainable Development. Fifteen Strategies have been approved in December 2022. Some of them (Sardinia, Apulia, Marche, Umbria, Lazio, Liguria) also developed Climate Adaptation strategies intertwined with the sustainable development strategic processes and governance. All Italian metropolitan cities are also committed to devising their respective metropolitan agendas for sustainable development, a voluntary tool for building strategic visions to work on urban and metropolitan contexts and achieve the objectives pursued by the Regional and Provincial Strategies for Sustainable Development. Five metropolitan agendas have been approved to date (Bologna, Milano, Firenze, Cagliari, Torino). Two inter-institutional Roundtables are active at MASE for the NSDS implementation and its application at territorial levels (one with Regions and Autonomous Provinces; the other with Metropolitan Cities), as structured mechanisms of permanent and multi-level interaction for sustainable development and policy coherence. At both levels, cross-sectoral steering committees in each administration were set up to coordinate and manage the complexity of strategies.

JAPAN

Regional Decarbonization Roadmap

The Regional Decarbonization Roadmap was formulated in 2021, based on which the national and subnational governments work together to promote regional decarbonization that will be a growth strategy for regions, including not only urban but also rural areas. The

national government provides comprehensive support to subnational governments in terms of human, technical, and financial resources. Based on the roadmap, Japan will designate at least 100 areas as "Decarbonization Leading Areas," aiming to achieve regional revitalization as well as carbon neutrality by 2030.

UK

The Net Zero Strategy and Net Zero Growth Plan (repeat)

The UK Government is working closely across all levels of government and with Devolved Administrations in Wales, Scotland, and Northern Ireland to reduce emissions and deliver net zero, as set out in The Net Zero Strategy and the Net Zero Growth Plan.

<https://www.gov.uk/government/publications/net-zero-strategy>

3. Initiative

CANADA

Net-Zero Challenge

The Net-Zero Challenge is an initiative that aims to encourage businesses to develop and implement credible and effective plans to transition their facilities and operations to net-zero emissions by 2050. Launched in August 2022, it has over 120 participating companies to date. Going forward, the Net-Zero Challenge will be not only for businesses but also for cities. The Government of Canada is committed to expanding the program to public entities and local government to ensure all parts of the economy move toward net-zero.

<https://www.canada.ca/en/services/environment/weather/climatechange/climate-plan/net-zero-emissions-2050/challenge.html>

JAPAN

Decarbonization Leading Areas

Based on the Regional Decarbonization Roadmap, Japan will designate at least 100 areas as "Decarbonization Leading Areas," aiming to achieve regional revitalization as well as carbon neutrality by 2030, ahead of the national target year of 2050, and replicate these leading models to other areas for making "decarbonization domino effect" across the country. As of October 2023, 26 proposals submitted from 32 prefectures and 83 municipalities were selected by October 2023.

Self-supporting decentralized areal energy system

The Self-supporting decentralized areal energy system is a system in which multiple buildings located in close proximity within a district or town block are linked by a network

of heat pipes and self-supply lines to provide an efficient energy supply by exchanging energy (heat and electricity). By providing support for the construction of energy supply facilities in conjunction with the construction of energy pipelines that are implemented together with urban development projects, the introduction of a self-supporting decentralized areal energy system is being promoted.

Good Practice

By developing an energy network and installing combined heat and power as an energy supply facility, Sapporo City is building a low-carbon structure for the entire region and a system that will enable this region to maintain self-sustaining functions in the case of disaster.

US

ENERGY STAR

ENERGY STAR® is the government-backed symbol for energy efficiency. The blue ENERGY STAR label provides simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions.

ENERGY STAR is administered by the U.S. Environmental Protection Agency. Thousands of organizations—including nearly 40% of the Fortune 500®—partner with ENERGY STAR. Together with EPA, they deliver cost-saving energy efficiency solutions that protect the climate, improve air quality, and protect public health. Since 1992, ENERGY STAR and its partners have helped American families and businesses:

- Saved 5 trillion kilowatt-hours of electricity.
- Avoided more than USD 500 billion in energy costs.
- Achieved 4 billion metric tons of greenhouse gas reductions.

<https://www.energystar.gov/>

National Pollution Discharge Elimination System - Stormwater Management

The NPDES stormwater program regulates some stormwater discharges from three potential sources: municipal separate storm sewer systems (MS4s), construction activities, and industrial activities. Operators of these sources might be required to obtain an NPDES permit before they can discharge stormwater. This permitting mechanism is designed to prevent stormwater runoff from washing harmful pollutants into local surface waters.

<https://www.epa.gov/npdes/npdes-stormwater-program>

Renewable Fuel Standard Program

Congress created the Renewable Fuel Standard (RFS) program to reduce greenhouse gas

emissions and expand the nation's renewable fuels sector while reducing reliance on imported oil.

EPA has approved fuel pathways under the RFS program under all four categories of renewable fuel. Advanced pathways already approved include ethanol made from sugarcane; jet fuel made from camelina; cellulosic ethanol made from corn stover; compressed natural gas from municipal wastewater treatment facility digester; and others. Biomass-based diesel must meet a 50% lifecycle GHG reduction; Cellulosic biofuel must be produced from cellulose, hemicellulose, or lignin and must meet a 60% lifecycle GHG reduction; Advanced biofuel can be produced from qualifying renewable biomass (except corn starch) and must meet a 50% GHG reduction; and Renewable (or conventional) fuel typically refers to ethanol derived from corn starch and must meet a 20% lifecycle GHG reduction threshold.

<https://www.epa.gov/renewable-fuel-standard-program>

EU

Horizon Europe Mission on Adaptation to Climate Change

The Mission on Adaptation to Climate Change focuses on supporting EU regions, cities, and local authorities in their efforts to build resilience against the impacts of climate change.

The Mission contributes to putting the EU's adaptation strategy into practice by helping the regions to

- better understand the climate risks they are and will be confronted with in the future;
- develop their pathways to be better prepared and cope with the changing climate;
- test and deploy on the ground innovative solutions needed to build resilience.

The Mission's objective is to accompany by 2030 at least 150 European regions and communities towards climate resilience.

<https://climate-adapt.eea.europa.eu/en/mission>

New European Bauhaus

The New European Bauhaus initiative connects the European Green Deal to citizens' daily lives and living spaces. The New European Bauhaus inspires a movement to facilitate and steer the transformation of societies along three inseparable values: sustainability, aesthetics, and inclusion.

One hundred different projects on the ground and over 100 million EUR of NEB investment

https://new-european-bauhaus.europa.eu/index_en

https://new-european-bauhaus.europa.eu/get-inspired/inspiring-projects-and-ideas_en

The Green City Accord

The Green City Accord is a movement of European mayors committed to making cities cleaner and healthier. By signing the Accord, cities commit to addressing five areas of environmental management: air, water, nature and biodiversity, circular economy and waste, and noise.

Currently, there are 104 signatories.

https://environment.ec.europa.eu/topics/urban-environment/green-city-accord_en

https://environment.ec.europa.eu/publications/green-city-accord-best-practice-collection_en

Good Practice

An action plan encompassing both short and long-term measures was co-created by numerous stakeholders in Oslo to prevent plastic from infiltrating the environment and reaching the Oslo Fjord, as well as to eliminate existing plastic pollution. In 2019, the City of Oslo initiated a plastic manifesto geared towards engaging the private sector in the development and execution of sustainable solutions. The objective is to encourage companies to actively participate by proposing and implementing measures, methods, and systems aimed at curtailing the unnecessary usage of plastic. The city also uses public procurement to reshape the consumption patterns and reduce the unnecessary use of plastic bottles in municipal bodies. Mapping of purchases of all products was conducted to identify products and agencies that need to be targeted at.

EU Covenant of Mayors for Climate & Energy

Since 2008, the EU Covenant of Mayors for Climate & Energy has brought together thousands of local governments that voluntarily commit to implementing EU climate and energy objectives. The initiative has been designed to provide local governments, in highly diversified national contexts, with a framework for their local energy and climate action. It covers climate mitigation, adaptation, energy poverty as well as energy security measures. Currently, there are 11791 signatories and 7884 submitted action plans.

<https://eu-mayors.ec.europa.eu/en/home>

<https://eu-mayors.ec.europa.eu/en/resources/library>

Good Practice can be found at https://eu-mayors.ec.europa.eu/en/key_action_list

Horizon Europe Mission on Climate-Neutral and Smart Cities

The Horizon Europe Mission on Climate-Neutral and Smart Cities involves local authorities, citizens, businesses, investors, as well as regional and national authorities to 1) deliver 100

climate-neutral and smart cities by 2030; 2) ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050.

The 100 cities come from all 27 Member States, with 12 additional cities coming from countries associated or in the process of being associated to Horizon Europe.

https://research-and-innovation.ec.europa.eu/funding/funding-opportunities/funding-programs-and-open-calls/horizon-europe/eu-missions-horizon-europe/climate-neutral-and-smart-cities_en

Scalable Cities

The Scalable Cities intends to identify and promote energy solutions and business models that can be scaled up and replicated across Europe and lead to measurable outcomes. By promoting extensive collaboration among stakeholders across Europe, this program aims to provide tangible evidence on how smart actions can lead the realization of climate-neutral cities.

Scalable Cities represents 120 cities involved in 18 Smart Cities and Communities projects funded by Horizon 2020 with around EUR 345 million. More than 53% of energy was saved, and up to 88% of CO₂ emissions were reduced.

<https://smart-cities-marketplace.ec.europa.eu/scalable-cities>

Good Practice

Holistic refurbishment and retrofitting in Lyon, Munich, and Vienna

Cities of Lyon, Munich, and Vienna took a holistic and integrative approach towards refurbishment and retrofitting of different housing types such as social housing, elementary schools, and private housing estates with the added energy benefits in terms of installed photovoltaic panels, geothermal and heat pump solutions. Cities focused on integrating solutions at the building level with the installation of local renewable energy solutions to be included in the refurbishment and renovation of buildings in their project portfolio.

<https://smart-cities-marketplace.ec.europa.eu/best-practices>

4. Finance

CANADA

Low Carbon Economy Fund

The fund supports the low-carbon economy transition of municipalities, businesses, and Indigenous Peoples, among others. The Low Carbon Economy Fund (LCEF) supports projects to reduce Canada's greenhouse gas (GHG) emissions, generate clean growth, build

resilient communities, and create good jobs for Canadians through four streams.

- The Low Carbon Economy Leadership Fund supports provinces and territories to help them deliver on commitments to reduce GHG emissions.
- The Low Carbon Economy Challenge supports the use of proven, low-carbon technologies to reduce GHG emissions.
- The Indigenous Leadership Fund supports clean energy and energy efficiency projects led by First Nations, Inuit, and Métis governments, communities, and organizations.
- The Implementation Readiness Fund supports activities and investments that increase the readiness of GHG emissions reduction projects.

The LCEF also supports the Government of Canada's plans to achieve greenhouse gas (GHG) emissions reductions in 2030 and goals for net-zero emissions by 2050.

<https://www.canada.ca/en/environment-climate-change/services/climate-change/low-carbon-economy-fund.html>

Disaster Mitigation and Adaptation Fund

The Disaster Mitigation and Adaptation Fund is a CAD 3.8 billion direct-delivery, merit-based program aimed at increasing the resilience of communities by funding public infrastructure projects designed to mitigate current and future climate-related risks and disasters triggered by natural hazards, such as floods, wildfires, droughts, erosion, and severe storms. The program's goal is to mitigate the risk of infrastructure failure that could result in: threats to health and safety; threats to critical infrastructure, including interruptions in essential services; significant disruption in economic activity; and/or increasingly high costs for recovery and replacement. To date, we have announced over CAD 2.3 billion in funding over 84 projects across the country to mitigate threats of natural disasters such as floods, wildfires and droughts.

<https://www.infrastructure.gc.ca/dmaf-faac/index-eng.html>

Good Practice

A project supported by the Fund reduces the drought experienced in the Tyendinaga Mohawk Territory through the extension of the water main infrastructure. Once completed, the project will bring reliable access to safe drinking water to the community during drought events and reduce the number of directly affected people by 83% and reduce local economic losses by 80%..

Green and Inclusive Community Buildings Program

The Green and Inclusive Community Buildings Program supports low carbon, climate

resilient, and higher performing publicly accessible buildings in high-needs, underserved communities across Canada. This is achieved through retrofits, repairs or upgrades of existing buildings, or the construction of new, net-zero carbon buildings. The program objectives are to improve the availability and condition of community buildings in Canadian communities experiencing higher needs and who are currently underserved. It also helps to stimulate the economy, creating good job opportunities while aligning to the net-zero and energy efficiency goals of Canada's strengthened climate plan.

To date, the Green and Inclusive Community Buildings Program has approved and announced 95 projects with federal funding of over \$547.7 million.

<https://www.infrastructure.gc.ca/gicb-bcvi/index-eng.html>

Good Practice

*A new **Elder Care Home for Mohawks of the Bay of Quinte** will provide a home for a growing seniors population. With net-zero carbon and energy-saving components, this will be the community's first green long-term care home. It will offer critical services to residents, including: 24-hour nursing and personal care; Indigenous-led services to elders to support aging in place and keep them connected to their communities, culture and language; and improved health and wellness. Once built, the facility will meet and/or exceed the highest accessibility standards within the jurisdiction.*

Natural Infrastructure Fund

The Natural Infrastructure Fund invests in projects and initiatives that use nature-based solutions to deliver multiple community services, by planting and restoring greenspace, water retention or detention systems and improving water diversion and infiltration. The program's objectives are to build climate resilience, protect the natural environment, reduce pollution, improve access to nature and enhance biodiversity and habitats.

To date, the Natural Infrastructure Fund approved and announced 3 projects with a total federal contribution of \$25 million under the Large Projects Stream including projects for Halifax, Winnipeg, and Vancouver. These projects include, increasing the tree canopy and infiltration of runoff along historic broadway avenue in downtown Winnipeg, reducing coastal ecosystems and reduction of coastal erosion and restoring shoreline ecosystems along a critical access roadway in Halifax, and developing an interconnected stormwater management system to prevent flooding, reduce sewage discharge and improving water quality in Vancouver.

Good Practice

The City of Vancouver's "Rain City Strategy Using Nature-Based Solutions"

Project will implement or enhance natural infrastructure distributed across the city, including rainwater tree trenches, wetlands, stream restoration, and hybrid infrastructure such as bioswales and permeable land cover. Once complete, this project will improve water quality and provide climate adaptation and increase flood resilience, species protection, and biodiversity. Furthermore, it will improve livability for residents by reducing urban heat island effects, improving air quality and creating more access to nature.

Green Municipal Fund

The Green Municipal Fund is a revolving fund endowed by the Government of Canada administered by the Federation of Canadian Municipalities. The mandate is broad and evolving and uses a mix of funding, resources, and training to help municipalities implement sustainable solutions, build resiliency and integrate climate action into municipal planning processes. Some of the GMF's objectives are to: accelerate the development and execution of municipal sustainability projects; validate solutions that have the potential to scale up across Canada; and catalyze funding from the private and not-for-profit sectors, provinces and territories, and utilities.

The Fund has invested in almost 2,000 municipal projects, which has resulted in migrating over 2.82 million tons of GHGs. In 2022, the Government of Canada announced an additional \$530 million for the GMF to support a minimum of 1400 community adaptation projects. Operating as a well-managed endowment, the base operating capital has been preserved and is creating enough return from its loan portfolio and investments to ensure continuous investments in communities across Canada.

<https://greenmunicipalfund.ca/>

Good practice can be seen at <https://greenmunicipalfund.ca/case-studies>

Public Transit Fund

The Public Transit Fund entitled "Healthy and sustainable modes of transportation for all" encompasses \$14.9 billion in investments over the next eight years in reliable, fast, affordable, and clean public transit. This funding includes \$3 billion per year in permanent, predictable federal public transit funding which will be available to support transit solutions beginning in 2026/27. So far, available application-based funds include Rural Transit Solutions Fund with \$250 million to locally driven transit solutions for rural and remote communities. There is also a Zero Emission Transit Fund with \$2.75 billion available to support public transit and school bus operators plan for electrification, as well as the

purchase of 5,000 zero emission buses. Lastly, Active Transportation Fund with \$400 million is available for projects that build new and expanded networks of pathways, bike lanes, trails, and pedestrian bridges.

<https://www.infrastructure.gc.ca/transit-transport/index-eng.html>

FRANCE

Green Fund

With EUR2 billion in funding in 2023, the Green Fund is designed to finance projects submitted by local authorities and their public or private partners in three areas: environmental performance (including energy-efficient renovation of buildings), adapting the region to climate change and improving the quality of life (including urban greening). A minimum of 10% of the dotation has to be dedicated to adaptation actions.

<https://www.ecologie.gouv.fr/fonds-vert>

GERMANY

National Climate Initiative (NKI)

NKI is the funding program that focuses on local authorities in implementing climate protection measures. Since 2008, the funding of investment projects has reduced greenhouse gas emissions by a total of around 16 million metric tons of CO₂e (net over the effective period). Further greenhouse gas reductions of 23.4 million metric tons of CO₂e (net over the effective period) have also been triggered by strategic projects.

<https://www.klimaschutz.de/de>

Good Practice

(a) Wärmewende Meldorf

Germany's first earth basin heat storage for the use of industrial waste heat for the district heating supply not only reduce carbon emissions, but also provide flexibility and security of supply system to the residents of town of Meldorf, Schleswig-Holstein, a small town in North-Western Germany.

<https://www.ramboll.com/projects/energy/germany-s-pit-thermal-energy-storage>

(b) Solarheatgrid

With its model project "Construction of Germany's largest solar thermal plant in Ludwigsburg and integration into the extended district heating network of Stadtwerke Ludwigsburg-Kornwestheim GmbH (SWLB)", provision of heat in its

entire district heating area from regional renewable energies is pursued in the long term. <https://www.klimaschutz.de/de/projekte/solarheatgrid>

(c) Waste field

Replacement of aged artificial turf field with an environmentally friendly alternative. Bio-based and climate-neutral in production with high durability at the same time, the new field turf meets the highest demands of an athlete. As part of the project, the aged artificial turf system was removed, recycled, returned to the economic cycle, and the new, bio-based, rapeseed oil-based system was installed. More than 300t CO₂e are saved and about 135t of waste are avoided.

<https://fc-oberabtsteinach.de/sportplatz-projekt/>

Urban Development Support Program

This funding program of federal level, state level and municipalities supports urban development projects.

Adaptation of Urban Spaces to Climate Change program

This is the investment program which supports the development and modernization of the blue-green infrastructure.

Climate change adaptation in social institutions (AnpaSo Förderprogramm)

A funding program for municipalities and welfare associations

- As of December 31, 2022, a total of 115,061 individuals will be directly reached by adaptation measures. (An adaptation concept is drawn up for 621 institutions, 66,248 vulnerable persons in social institutions received benefit directly from funded adaptation measures, 48,818 employees in social institutions can also benefit directly).
- 475 institutions are adapted, with measures on or in buildings and in the areas surrounding buildings
- The most frequently mentioned social institutions to benefit funding are kindergartens (32%), elderly care and nursing facilities / services (15%), and schools (13%).

<https://www.z-u-g.org/anpaso/>

Good Practice

From spring to fall 2021, two projects were implemented in a total of 23 kindergartens in Bonn as part of the funding to help them adapt to heat and heavy rain. The aim was to identify, in particular, smaller measures that could be implemented quickly, such as solar sails or greening the courtyard.

In the project detailed concepts were also drawn up for three selected kindergartens, including larger structural measures that are now being implemented. The knowledge gained in this way about climate adaptation measures can also be transferred to other kindergartens and thus makes a long-term contribution to the quality of living and working in Bonn's social institutions.

<https://zentrum-klimaanpassung.de/wissen->

[klimaanpassung/praxisbeispiele/beratung-und-konzepte-zur-klimaanpassung-fuer-kitas-bonn](https://zentrum-klimaanpassung.de/wissen-klimaanpassung/praxisbeispiele/beratung-und-konzepte-zur-klimaanpassung-fuer-kitas-bonn)

<https://www.z-u-g.org/anpasso/projekte/>

German Adaptation Strategy funding program (DAS Förderprogramm)

The funding program started in 2011 with the aim of supporting the German Adaptation Strategy. Initially, it financed a wide variety of pilot adaptation projects. It was reformed in 2021 in order to focus on enhancing municipal adaptation efforts, mainly through personnel (climate change adaptation managers) and the creation of adaptation concepts. Up to date, a total of 501 projects have been funded, a total of 352 since 2018. In its reformed version and as of the end of July 2023, 97 projects with adaptation managers were funded, of which 81 projects relate to the preparation of adaptation concepts and 16 projects to the implementation of climate adaptation concepts. The first monitoring report on this grant has not yet been completed, but initial data analysis shows that, according to the applicants, contributions are to be made in particular to the following Sustainable Development Goals - SDG 11 Sustainable Cities, SDG 15 Protect terrestrial ecosystems, SDG 3 Health, SDG 13 Measures to combat climate change, and SDG 6 Sustainably protect oceans, seas and marine resources.

<https://www.z-u-g.org/das/>

<https://www.z-u-g.org/das/projekt/alle-projekte-des-das-foerderprogramms/>

ITALY

Sustainable Urban Mobility Incentive Program (PrIMUS)

The program encourages and co-finances urban mobility choices alternative to the use of private cars, promoting the spread of environmentally friendly forms of mobility and vehicle sharing, as well as the propensity to change citizens' habits and behavior in favor of sustainable mobility.

The program has a budget of 15 million EUR to co-finance projects submitted by municipalities that fall under one of the following actions.

<https://www.mase.gov.it/pagina/primus>

Good Practice

PrIMUS helps creation of new cycle paths able to meet the demand for urban home-school and home-work journeys; development of sharing mobility in urban areas; development of mobility management activities at the premises of state administrations (central and peripheral offices), territorial administrations, schools and universities.

Program for the promotion of sustainable school transport

The program finances projects for the realization or implementation of school transport services for state and municipal kindergarten and first-cycle state school children with hybrid or electric means of transport

<https://www.mase.gov.it/pagina/programma-di-finanziamento-la-promozione-del-trasporto-scolastico-sostenibile>

Milano Transition Fund

The role of the innovative financing mechanism is crucial. The Milano Transition Fund (MTF) is for the creation of central public-aligned entity that combines public and private finance to deliver Green Neighbourhoods.

<https://eit.europa.eu/news-events/news/new-air-and-climate-plan-milan>

Good Practice

The MTF2026 project was developed through a co-design process that involved representatives of the Associations of condominium managers, tenants and technical operators in the building sector. The model developed and proposed by the MTF2026 project aims to lay the foundations for the launching of a broad and profound energy requalification program for buildings, by renewing both the envelopes and the energy systems, aggregating the demand and combining elements of regeneration of the interested neighborhoods through implementation of green infrastructures and public spaces, in a systemic vision for a “carbon neutral community agenda”. MTF2026 is co-financed by EIT Climate-KIC and the project partnership that involves Politecnico di Milano, Poliedra, Milano Municipality, Bankers Without Boundaries, Dark Matter Laboratories, AMAT and REDO SGR.

JAPAN

Japan Green Investment Corp. for Carbon Neutrality (JICN)

JICN is a public-private investment fund established in October 2022, which provides financial supports to a variety of decarbonization projects aiming to boost the investment from the private sector.

Capital contribution at the time of establishment is JPY 20.4 billion. The list of the shareholders is as follows.

- Private shareholders: 82 companies, JPY 10.2 billion)
- Financial institutions: 57 institutions including the Development Bank of Japan, 3 mega banks, regional banks and others
- Business companies: 25 companies including energy, steel, chemical, etc.
- Government: Fiscal Investment and Loan (Industrial Investment), JPY 10.2 billion at establishment. In FY2022: JPY 20 billion maximum (including JPY 10.2 billion capital at establishment) and in FY2023: JPY 40 billion maximum + JPY 20 billion government guarantee (less than 5 years)

https://www.env.go.jp/en/press/press_00704.html

Green Infrastructure Urban Development Support Program

The program promotes mitigation of urban flood and improvement of urban productivity and comfort by supporting the development of green infrastructure through public-private partnerships and cross-sector cooperation.

https://www.mlit.go.jp/toshi/park/toshi_parkgreen_fr_000040.html

Good Practice

Kyoto City is using the Green Infrastructure urban Development Support Program to develop parks and green spaces with high rainwater storage and infiltration capacity, and is also developing a rain garden with a structure that temporarily stores rainwater and allows it to slowly infiltrate into the ground, taking advantage of Kyoto's garden culture. By developing such green infrastructure, Kyoto City is improving urban resilience, creating a favorable landscape, and promoting the creation of a sustainable and attractive city.

UK

UK Growth Funding

Through the introduction of UK-wide growth funding schemes, Government is enabling local areas to tackle net zero goals in ways that best suit their needs. For example, the £2.6 billion UK Shared Prosperity Fund which states that investment made under this Fund

should demonstrate the extent of contribution to net zero and nature recovery objectives.

<https://www.gov.uk/government/publications/net-zero-strategy>

Good Practice

West Devon District Council was awarded £1.1m as part of the UK Shared Prosperity Fund, awarded to support business and community. The Council is using its funding within the Borough to achieve the most sustainable outcomes possible to support the Council's Climate Change and Biodiversity promise to become net-zero in the Borough by 2050. Across the Borough the Council's specialist officers will be offering wider business decarbonization support and consultancy with support for Community Energy Groups to help them bring projects forward and access funds to support their goals.

Industrial Strategy Challenge Fund - Prospering from the Energy Revolution

The UK Government committed up to £104 million of funding through the Industrial Strategy Challenge Fund to the Prospering from the Energy Revolution (PFER) program. The program developed smart local energy systems to provide investable, scalable local business models and finance mechanisms using integrated approaches to deliver cleaner, cheaper energy services.

<https://www.ukri.org/what-we-offer/our-main-funds/ukri-challenge-fund/>

Good Practice

Project LEO (Local Energy Oxfordshire) under the Industry Strategy Challenge Fund, UK

Project LEO was supported by the PFER program, ran trials in Oxfordshire which looked to build a broad range of reliable evidence of the technological, market and social conditions needed for a greener, more flexible, and fair electricity system. Project LEO is partly funded through £15 million from the Industrial Strategy Challenge fund, with partners in Oxford City Council and Oxfordshire County Council.

<https://project-leo.co.uk/>

UK Infrastructure Bank (UKIB)

The government has established the UK Infrastructural Bank (UKIB) with an initial £12 billion of capital for the twin goals of tackling climate change and levelling up. This includes a £4billion loan facility for local government.

<https://www.ukib.org.uk/>

Good Practice

The Bank will work with Bristol City Council as they begin the delivery of their innovative City Leap partnership that will build £1bn of net zero infrastructure, including strategic heat networks, over the next 20 years.

<https://www.ukib.org.uk/news/focus-supporting-local-authorities-their-journey-net-zero>

3Ci (Cities Commission for Climate Investment)

The Government has funded 3Ci which is a partnership between Connected Places Catapult, Core Cities UK, London Councils, and other local authorities across the UK aimed at supporting local authorities secure the necessary long-term finance for achieving net zero.

<https://www.3ci.org.uk/>

Community Energy Fund

In August 2023, we announced the £10million Community Energy Fund which provides grant funding for urban and rural communities to develop local renewable energy projects for investment, provides a mechanism to support the community energy sector. This is delivered through the Local Net Zero Hubs and expands on the success of the previous Rural Community Energy Fund.

<https://www.gov.uk/government/news/communities-at-the-heart-of-new-fund-to-boost-local-growth-and-energy-security>

US

Clean School Bus Program Rebates through the Bipartisan Infrastructure Investment and Jobs Act

The Bipartisan Infrastructure Law is a historic investment in the resiliency of our infrastructure to climate change, cybersecurity risks, and other hazards. This investment will help to protect communities against the impacts of climate changes such as droughts, heat, floods, wildfires, as well as cyber-attacks and other threats. It is also the largest investment in clean energy infrastructure in American history.

USD5 billion are for decarbonizing the nation's school bus fleet, improving air quality for more than 25 million children who ride the bus to school each day.

<https://www.epa.gov/cleanschoolbus/awarded-clean-school-bus-program-rebates>

Climate Ready Estuaries Program

Climate Ready Estuaries assists the National Estuary Program (NEP) and coastal communities in becoming "climate ready" by providing tools and assistance to assess climate change vulnerability and plan for adaptation.

<https://www.epa.gov/cre>

EU

Smart Cities Marketplace

The Smart Cities Marketplace plays an important role in speeding up the green transition of cities in Europe by improving citizens' quality of life, increasing the competitiveness of European cities and industry as well as reaching European energy and climate targets. It complements current EU efforts such as REPowerEU with a complete catalogue of offers such as calls for free technical assistance, 1-to-1-consultancy services for city-led consortia close to the financing stage, financing masterclasses and a fine-tuned matchmaking for the financing of urban projects and intensified partnerships with other EU initiatives.

127 Bankable project proposals received 616.3 EUR million matched with investor interest
18 Investor network members

<https://smart-cities-marketplace.ec.europa.eu/>

<https://smart-cities-marketplace.ec.europa.eu/insights>

<https://smart-cities-marketplace.ec.europa.eu/projects-and-sites>

Good Practice

The City of Bydgoszcz, has successfully applied for technical assistance and consultancy services from the Smart Cities Marketplace, supporting the city to realize its ambitious renewable energy project, building on its Sustainable Energy and Climate Action Plan (SECAP) and the investment concept funded by the European City Facility (EUCF). Bydgoszcz intends to implement 10 photovoltaic farms with a total capacity of approximately 40 megawatts (MW), at an indicative investment volume in the order of 50 million EUR. The project also involves creating a cutting-edge hydrogen generation system that is primarily intended to de-carbonize the city's bus transportation system. The project has the potential to be replicated in Poland and expanded beyond its initial scope.

<https://europa.eu/!MgbWtf>

European City Facility

Set up under the Horizon 2020 Framework Program for Research and Innovation of the European Union, and being co-funded as part of the LIFE program, the EUCF unlocks local

potential and support municipalities, local authorities, their groupings and local public entities aggregating municipalities/local authorities in Europe with tailor-made, fast and simplified financial support (in the form of 60,000 EUR lump sums) and related services to enable them to develop relevant investment concepts related to the implementation of actions identified in their climate and energy action plans.

The first call of the European City Facility took place in 2020 and since then four successful calls have been completed awarding 213 local governments with funding to develop their Investment Concepts.

<https://www.eucityfacility.eu/home.html>

<https://www.eucityfacility.eu/investment-concepts/success-stories.html>

European Urban Initiative

The European Urban Initiative is an essential tool to support cities of all sizes, to build capacity and knowledge, to support innovation and develop transferable and scalable innovative solutions to urban challenges of EU relevance. The EUI provides different levels of assistance: Supporting urban authorities with up to 80% direct co-financing and up to 5M EUR ERDF, allowing EU cities to experiment as testbeds for their innovative idea and transferring it to other cities, Strengthening capacities of cities in the design of sustainable urban development strategies, policies and practices in an integrated and participative way; Providing a knowledge environment for cities to ensure easier access to horizontal and thematic knowledge and share the know-how on sustainable urban development. With an indicative budget of 50 million EUR ERDF, the first Call for Proposals of EUI - Innovative Actions is targeting innovative projects focusing on the New European Bauhaus. In total 125 Urban Authorities applied, out of which small and medium size cities (less than 250,000 inhabitants) account for 76%

<https://www.urban-initiative.eu/>

Good Practice

'Greening Cities' is the topic of the second EUI-IA Call for proposals opened in the end of May 2023. Under the topic 'Greening Cities,' the projects will be funded to experiment and deliver tangible innovative solutions on green infrastructure across European cities, for better addressing the biodiversity, pollution, resource and climate challenges, including synergy development with other key policy areas. The innovative solutions tested under the funded projects are expected to contribute to Cohesion policy investments related to the green and just transition and will embrace the issue of being affordable to all.

5. Information/Data/Technical Guidance

CANADA

The Canadian Center for Climate Services

The Center works with partners and stakeholders to provide Canadians with information and support to consider climate change in their decisions. It does this by:

- Increasing awareness of and providing easy access to climate data and information
- Providing training and guidance on using climate data
- Engaging with users to understand need.
- Developing new products collaboratively with experts and users

The Center supports two climate data portals. The Center's website provides access to a library of climate resources, climate information, the Center Support Desk, and tools to visualize climate data. ClimateData.ca provides climate model projections and historical data at a local scale for many environmental variables. Currently, the Center has about 20,000 visitors per month across its platform, a number that increasing year-over-year since its inception in 2018.

FRANCE

The Resource Center for Adaptation to Climate Change

The Center is positioned as a single point of information, redirecting local authorities to all the data and methods proposed on the subject of adaptation to climate change.

JAPAN

PLATEAU

PLATEAU is a project to develop, utilize, and open data of 3D city models. The 3D urban model is a digital twin model that guarantees the accuracy of the location as a "map" that is the product of public surveying, and also provides not only shape but also attribute information such as use, height, and age of the building. Using this model, we are promoting heat island countermeasures (thermal environment simulation using thermo-fluid analysis) and urban development based on the simulation results.

https://www.mlit.go.jp/en/toshi/daisei/plateau_en_2.html

Good Practice

Kumagaya City attempted to promote the selection of suitable sites for smart town development based on ventilation and thermal stress by conducting wind and thermal environment simulations using the 3D urban model.

US

Climate Change Adaptation Resource Center (ARC-X)

EPA's Adaptation Resource Center (ARC-X) is an interactive resource to help local governments effectively deliver services to their communities even as the climate changes. Decision makers can create an integrated package of information tailored specifically to their needs. Once users select areas of interest, they will find information about: the risks posed by climate change to the issues of concern; relevant adaptation strategies; case studies illustrating how other communities have successfully adapted to those risks and tools to replicate their successes.

EPA works with Brazil and Latin America and Africa to transfer ARC-X.

<https://www.epa.gov/arc-x>

6. Capacity Building

FRANCE

Climate and energy observatories

The observatories set up on a voluntary basis in different regions also provide territorial actors with climate change indicators and examples of adaptation actions.

Training targeted at Mayors

It is planned to train at least 30,000 mayors in the challenges of ecological transition on the basis of a successful pilot training course on adaptation for local elected officials held in September 2022. The large-scale training has not started yet.

JAPAN

Advisor for Decarbonization

In March 2023, the Ministry of the Environment established the Advisor for Decarbonization Program. This program aims to support small and medium enterprise to calculate their emissions and take necessary measures based on the emission data through the appointment of advisers who have daily contact with the companies. The Ministry of the Environment provides a guideline of the qualification system to certify advisors. By encouraging local stakeholders including local government officials to acquire advisor certification, the national government support capacity development of the persons who provide advice and practical support for decarbonization.

Local Net Zero Hubs Program

Then Local Net Zero Hubs programme helps local authorities and communities in England to play a leading role in decarbonisation. The program comprises 5 Local Net Zero Hubs which promote best practice and support local authorities to develop net zero projects and attract commercial investment. The Hubs also provide good practice guidance, tools, and resources to benefit Local Authorities across England.

<https://www.swnetzerohub.org.uk/>

<https://www.gsenetzerohub.org.uk/>

<https://www.midlandsnetzerohub.co.uk/>

<https://www.neynetzerohub.com/>

<https://nwrouetonetzero.com/> and <https://www.localenergynw.org/>

Good Practice

North East and Yorkshire Local Net Zero Hub are delivering the Public Sector Decarbonization Toolkit, a fundamental aspect of delivery of the Public Sector Decarbonization Fund (PSDF). This includes decarbonization plans for 60 local sites and energy assessments at 100 more. The toolkit provides a step-by-step guide to help partners develop and implement a Heat Decarbonization Plan and practical advice on applying for PSDS Funding. There have been 10 successful bids from region in most recent PSDF phase.

<https://www.neynetzerohub.com/resources/hub-guides/public-estate-decarbonization-guidance/>

Net Zero Living Program

Net Zero Living is run by Innovate UK, this is a £60 million, three-year program that aims to help places and businesses across the UK to accelerate the delivery of the transition to net zero. This includes:

- £1.5 million for the Net Zero Living Digital Accelerator Funding.
- The Pathfinder Place awards for UK registered businesses and local authorities to apply for a share of up to £2 million to plan for a place-based demonstration of ways to accelerate progress towards net zero; and
- The Fast Follower Awards for local authorities to apply for a share of up to £6 million to build skills and capabilities to accelerate local progress towards net zero.

<https://iuk.ktn-uk.org/program/net-zero-living/>

Net Zero Go

Net Zero Go is an online platform to offer practical support to help more councils deliver clean energy projects that help meet net zero targets, and support a homegrown, secure UK energy system.

The Knowledge Library brings together the sector's best and most trusted resources, offering over 700+ articles, checklists, toolkits, calculators and more.

<https://www.netzerogo.org.uk/s/>

US

Green Power Partnership

EPA's Partners include a wide variety of leading organizations, including large corporations; small and medium-sized businesses; local, state, and federal governments; non-profit institutions; and colleges and universities. The Partnership provides a simple framework for organizations to exercise their choice in how their power is generated, including:

- Credible minimum green power usage benchmarks.
- Market and supply options information.
- Procurement assistance and guidance.
- Public recognition for green power leadership and use.

At the end of calendar year 2021, more than 700 EPA Green Power Partners were using a total of more than 85 billion kilowatt-hours (kWh) of green power annually, which:

- Is equivalent to the annual electricity use of more than 8 million average American homes.
- Represents 35 percent of the total voluntary green power market in the United States.
- Represents more than 2 percent of total annual retail electricity sales in the United States.

<https://www.epa.gov/greenpower/about-green-power-partnership>

EU

European Urban Initiative (repeating)

7. Network/Information Exchange

CANADA

The Canadian Center for Climate Services' Network of Regional Climate Service Providers

The Center supports and fosters the development of regional climate expert organizations to provide locally relevant climate information to users across the country. A national network of those climate services providers has been developed and members regularly share best practices and discuss their experiences. At this time, the Center has finalized agreements with:

- British Columbia: Pacific Climate impacts Consortium (PCIC)
- Prairies: ClimateWest

- Québec: Ouranos
- Atlantic: CLIMAtlantic

The Center is also working with other regions and territories to foster the emergence of new regional climate expert organizations.

ITALY

Green City Network

Green City Network with more than 300 cities and 80 experts from Academia/Research center promotes carbon neutrality. The Network is an activity aimed at sustainable development to develop activities and interventions to activate and support a greater commitment of Italian cities at different size (large, medium and small) to improve ecological quality, climate mitigation and adaptation efforts, soil saving and the efficient and circular use of resources in a local sustainable development perspective.

UK

Local Net Zero Forum

The Local Net Zero Forum brings together national and local government senior officials on a regular basis to discuss policy and delivery options on net zero.

15 local government organizations and 7 central government departments are members of the Local Net Zero Forum.

Local Net Zero Hubs Program (repeat)

EU

Community of Practice – CITIES

The Community of Practice – CITIES (CoP-CITIES) empowers cities, city networks, academia and NGOs to share knowledge and expertise on urban issues, to anticipate potential challenges, and to generate scientific evidence for effective urban policies. The Community contributes towards more sustainable, resilient, inclusive cities, able to improve mobility, to provide affordable housing, to deal with ageing populations and to meet healthcare demands, while taking advantage of digital innovations. The CoP-CITIES publishes a bi-monthly newsletter, sharing information on key events and publications related to urban matters.

https://knowledge4policy.ec.europa.eu/territorial/community-of-practice-cities_en

CIVITAS

CIVITAS is one of the flagship programs helping the European Commission achieve its ambitious mobility and transport goals, and in turn those in the European Green Deal. It

does this by acting as a network of cities, for cities, dedicated to sustainable urban mobility. Through peer exchange, networking and training, CIVITAS fosters political commitment and boosts collective expertise, equipping cities to put mobility at the center of decarbonization. Since its launch in 2002, CIVITAS has advanced research and innovation in sustainable urban mobility and enabled local authorities to develop, test and roll out measures via a range of projects. A series of ten thematic areas underpin these. Over 330 local authorities are currently CIVITAS members.

<http://civitas.eu/>

Good Practice

DECARBOMILE aims to trigger an unprecedented improvement of green, last-mile logistics in Europe. Comprised of 31 partners from 10 countries, project partners will build upon previously developed results from other last-mile logistics projects, so as to improve delivery methods, tools and methodologies, and implementation across Europe. The solutions developed in DECARBOMILE will demonstrate the full potential of decarbonised last-mile logistics in four living labs cities. Four satellite cities will be involved at a smaller scale to further test and study developed solutions.

Definition of Categories

1. POLICY FRAMEWORK

A law, regulation, procedure, standards promulgated by a national government or its representatives which provides framework of subnational actions.

2. STRATEGY/PLAN

Documents promulgated by a national government or its representatives which provides set of activities including subnational actions (strategies and plans).

3. INITIATIVE

Leading actions, process, or movements to achieve targets/goals or solve problems.

4. FINANCE

Financial supports/incentives provided by national government or its representatives to subnational governments, which includes loans, guarantees, tax credits, investments, aid funds, grants, subsidies, and others.

5. INFORMATION/DATA/TECHNICAL SUPPORT

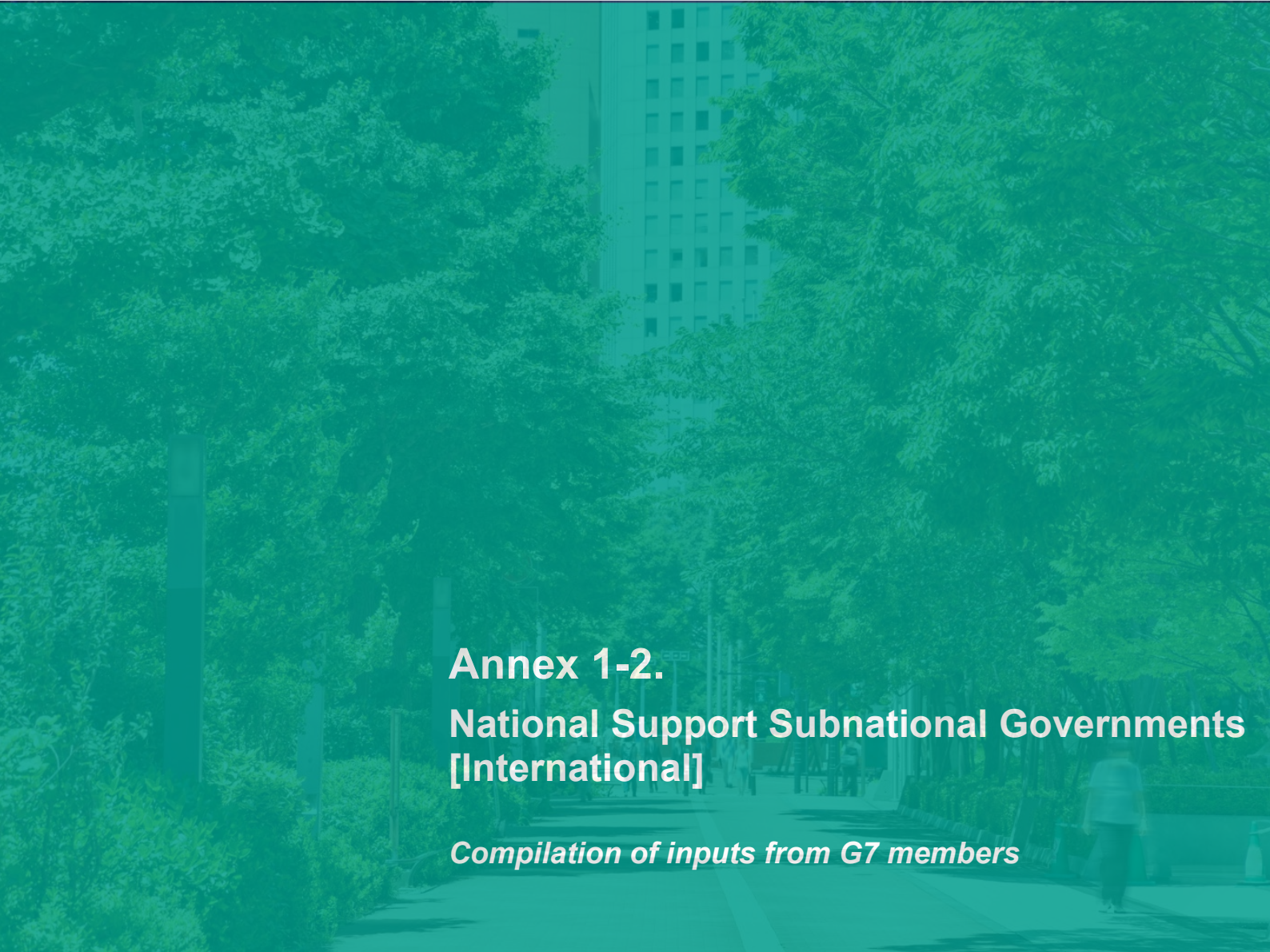
Provision of guidance/advice on use of a special technology, software, data and information gathering and any other supports. Provision of data and information from national governments to subnational governments, etc.

6. CAPACITY DEVELOPMENT

Provision of educational program, trainings, seminars, twinning program targeted at subnational government staff or any other equivalent staff. Sending consultants and advisors to provide know-how to subnational governments with objective of human capacity, skills, and knowledge development can be also categorized under this category.

7. NETWORKING/INFORMATION EXCHANGE

Exchange of information and ideas among subnational government staff or any other equivalent staff with special interest; platform to connect subnational government staff or any other equivalent staff in a physical or virtual environment to facilitate knowledge and information and exchange and/or building solidarity.



Annex 1-2.

National Support Subnational Governments [International]

Compilation of inputs from G7 members

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This Annex is a compilation of information provided by G7 members on international cooperation projects to support subnational climate action. This is a collection of cases of international cooperation projects, but does not cover all relevant international cooperation projects.

The measures are grouped into six categories. Some measures belong to more than one category. They are either classified into the closest category or restated. Definitions of each category are appended on the last page of this Annex.

1. Policy/Plan/Strategy

GERMANY

Urban-Act

Asia (China: Jiaxing, Xiamen, Xi'An/Gaoling district - India: Shimla, Coimbatore, Panaji - Philippines: Bacolod, Antipolo, Tagbilaran - Indonesia: Padang, Medan - Thailand: Phuket, Chiang Mai, Khon Kaen, up to 6 cities in the subregional IMT-GT)

Urban Act supports decarbonized and resilient urban development in Asia. It supports the development of climate-sensitive Integrated Urban Development Plans (IUDP) and facilitates innovative climate measures in the priority sectors of transport, circular economy, environment, and buildings. It thereby contributes to creating tangible mitigation and adaptation results. Policy frameworks are enhanced focusing on coordination and financial incentives for climate-sensitive urban development. Systematic regional engagement of all 5 countries contributes to regional agenda setting, knowledge sharing and scaling up of best practices. Urban-Act also considers the impacts of the COVID-19 health crisis and contributes to a green recovery. The budget from 2020-2022 is 2,954,569 EUR.

<Targets and Progress>

Standard Indicator¹(SI) 4 – Capacity people: Number of people directly supported by IKI projects through networking and training to address climate change or to conserve biodiversity: number of people: 500

SI 5 – Leveraged Finance: (Target) Volume of private and/or public finance leveraged for climate action or biodiversity purposes: Mobilized public finance / EUR: 540,000 (Target) in technical assistance for (early) project preparation.

<https://www.international-climate-initiative.com/en/project/urban-act-integrated-urban-climate-action-for-low-carbon-resilient-cities-22-i-416-asia-g-urban-act-integrated-climate-action/>

¹ Standard indicators (SI) is a set of indicators that are required for formal reporting for new projects to provide information of such as contribution/impacts of the IKI projects.

The integration of climate action in the Asia-Pacific region is a key intervention to spearhead climate-resilient development, with the IKI Urban-Act regional project partnership as one of the enablers for its operationalization.

<https://www.international-climate-initiative.com/en/iki-media/news/integrated-climate-action-for-low-carbon-and-resilient-cities-in-asia-and-the-pacific/>

ITALY

The Digital Demand-Driven Electricity Network Initiative (3DEN)

Cross-region/Global

This initiative coordinated by **International Energy Agency (IEA)** and financially supported by **the Ministry of Environment and Energy Security (MASE)**, is working to accelerate progress on power system modernization and effective utilization of distributed energy resources through policy, regulation, technology, and investment guidance at local level. 3DEN has a global focus. Initial geographic priorities include Brazil, Colombia, India, Indonesia, Morocco, South Africa, Tunisia, and critical regions like Latin America, Africa and ASEAN. In 2022, a testing phase at local level has been launched, in collaboration with UNEP, through pilot projects in Brazil, Colombia, India and Morocco.

<https://www.iea.org/programs/digital-demand-driven-electricity-networks-initiative>

Good Practice

In the framework of the 3DEN, the following dissemination activity have been implemented.

- *Organized or participated in more than 60 webinars and virtual workshops and held numerous bilateral exchanges with representatives from target countries and regions, the private sector, international and regional organizations, industry associations, start-ups and innovative companies, and academia.*
- *Contributed to more than 35 reference publications and produced 2 reports- Smart Grids for reliable and efficient power in emerging markets and developing economies and Digital Grids of the Future.*

JAPAN

Clean Cities Partnership Program (C2P2)

Cross-cutting, Cross-regional/Global

Under the Japan G7 Presidency in 2023, the Ministry of the Environment (MOEJ) and Japan

International Cooperation Agency (JICA) launched a new program, Clean Cities Partnership Program (C2P2) to mobilize engagement of multi-stakeholders on target cities and provide a comprehensive and synergetic support to urban agenda including climate change, environmental pollution, and circular economy.

City-to-city Collaboration Program for Zero-carbon Society

Cross-region/Global

To spread "decarbonization domino effect" to other countries, Japan supports the City-to-city Collaboration Program, in which Japanese cities transfer their knowledge and experience on decarbonization/adaptation in partnership with the private sector, which lead to net zero ambitions, implementation of action plans and regulations, and application of decarbonized/ climate resilient infrastructure in partner cities.

Since MOE Japan launched this project in 2013, 45 cities/regions and 20 Japanese cities, including the results of this time, have participated in this project.

<https://www.env.go.jp/earth/coop/lowcarbon-asia/english/project/>

Good Practice

Kuala Lumpur-Tokyo Cooperation:

Since 2019, Tokyo Metropolitan Government has been supporting the development of low carbon building standards for facilities owned by Kuala Lumpur City, Malaysia, in cooperation with the Institute for Global Environmental Strategies (IGES) and under the MOEJ's City-to-City Collaboration project. Tokyo Metropolitan Government (TMG) shared its policy and know-how with Kuala Lumpur on energy efficiency and renewable energy measures for TMG-owned facilities, among other building decarbonization measures implemented by TMG, conducted local workshops and training visits to Japan, and held over 50 online meetings during the COVID-19 pandemic to provide practical information and exchange opinions. Among the achievements to date are the development of renovation plans for municipal facilities in Kuala Lumpur City and the establishment of guidelines for energy management systems in the new construction, renovation, and operation phases of municipal facilities. Kuala Lumpur announced its zero-carbon goal and the cooperation obtained the C40 Award in October 2022. The cooperation is now strengthened by adding Saitama City as a partner.

UK

Climate Smart Development for Nepal

Nepal

This program aims to support Nepal's action to adapt to the impacts of climate change and promote clean development. In addition to providing strategic support to the Central Government, it also aims to improve resilience in the most remote district and support investments in urban planning.

The program aims to improve resilience of 700,000 poor and vulnerable people to natural disasters and improve resilience of businesses in 5 growing urban centers. It will facilitate connection of over 25,000 households to new micro-hydro power installations and connect over 70,000 homes to solar power.

<https://devtracker.fcdo.gov.uk/projects/GB-1-204984/summary>

US

Subnational Climate Action Leaders' Exchange (SCALE)

Cross-region/Global

At COP 27, the United States launched the Subnational Climate Action Leaders' Exchange (SCALE), a new initiative to support cities, states, and regions around the world in the development and implementation of net-zero, climate-resilient targets and roadmaps. It will connect local leaders with tools and resources to take ambitious climate action across key sectors, starting with an initial focus on methane reduction.

<https://www.state.gov/u-s-state-department-and-bloomberg-philanthropies-announce-support-for-the-subnational-climate-action-leaders-exchange/>

Mexico Partnership for Net Zero Cities

Mexico

USAID's Partnership for Net Zero Cities is leveraging existing frameworks and engaging stakeholders across five of Mexico's most populous cities and states, including Hermosillo, Monterrey, Guadalajara, Mexico City, and Mérida. The partnership is helping these cities and states reduce and avoid greenhouse gas emissions as they grow by: (1) adopting energy efficiency measures for net-zero buildings by 2050; (2) accelerating transitions to zero emission urban transportation systems; (3) reducing short-lived climate pollutants used in the industrial and waste sectors; and (4) mobilizing green financing for energy projects and improving municipal governance. In doing so, the partnership is creating jobs and accelerating Mexico's transition to a more robust and greener economy that can prosper for years to come. USD550 million in public and private financing leveraged.

<https://www.rti.org/impact/supporting-mexicos-net-zero-emissions-goals-through-climate-smart-actions>

EU

Cities and Climate in Africa (CICLIA)

Africa

Cities and Climate in Africa (CICLIA) Project in Sub-Saharan Africa is a facility to support cities in transforming local climate strategies into action plans, budgets, and urban investment projects with climate co-benefits on both mitigation and adaptation aspects. Seven investment projects following CICLIA benefit from a EU grant contribution of EUR 64 million on total donor investment at EUR 539 million.

<https://www.afd.fr/en/ciclia>

Good Practice

Creation of a Technical Landfill Center (CET) and a transfer center for waste from Greater Conakry, Guinea. The Project aims to improve the quality of life, the environment, and the health of the inhabitants and to reduce GHG emissions. It will make it possible to increase the capacity, performance, quality and efficiency of the downstream sector, and to strengthen the governance of the sector. mitigation and adaptation co-benefits.

2. Initiative

CANADA

Can\$5.3 billion climate finance commitment

Cross-region/global

Canada has announced a number of initiatives that support multilevel actions by a variety of stakeholders. Canada doubled its international climate finance commitment to Can\$ 5.3 billion over five years (2021-2026) to support developing countries' transition to low-carbon, climate-resilient, nature-positive, and inclusive sustainable development. Canada recognizes that urgent action is needed to address the interconnected crises of climate change and biodiversity loss, which disproportionately affect the poorest and most vulnerable around the world.

Indigenous Climate Leadership Agenda

Global

Canada is working with Indigenous communities to program locally driven climate priorities and perspectives in developing countries. The Government of Canada engaged with National Indigenous Organizations when formulating the current Can\$5.3 billion

international climate finance commitment. Based on the feedback from these organizations, Can\$315 million has been allocated to the Partnering for Climate initiative, which aims to leverage the climate action expertise and commitment of organizations in Canada. Out of the Can\$315 million, Can \$15 million have been earmarked over 5 years to fund projects that support climate action priorities of Indigenous Peoples.

The \$15M Indigenous Peoples Partnering for Climate initiative was developed jointly by representatives from the Assembly of First Nations, Inuit Circumpolar Council Canada, Métis National Council, and Global Affairs Canada. Funding will begin to flow to organizations in 2024. The initiative aims to improve the climate resilience of Indigenous Peoples in ODA-eligible countries through nature-based solutions for climate change adaptation. It will fund climate action projects designed and implemented by Indigenous Peoples in Canada in partnership with Indigenous Peoples in developing countries. This initiative was developed through a working group with climate change experts from the Assembly of First Nations, Inuit Circumpolar Council Canada (for Inuit Tapiriit Kanatami) and Métis National Council. These experts have been actively involved, including assessing concept notes. For this initiative, all applicants must integrate and respond to three guiding principles throughout their projects: Indigenous self-determination, Indigenous perspectives on climate adaptation, and Indigenous climate leadership. For example, organizations must demonstrate how they recognize and support the locally driven climate priorities and perspectives of Indigenous Peoples in developing countries. Where possible, applicants should indicate how the proposed project links to First Nation, Inuit and/or the Métis Nation climate priorities. The Government of Canada continues to learn from this partnership and is working to improve programming with Indigenous partners in the climate change and beyond.

<https://www.canada.ca/en/services/environment/weather/climatechange/canada-international-action/climate-finance.html>

Empowerment of Women for Climate Action

Honduras

This project aims to improve the quality of life of rural and indigenous women and youth whose livelihoods depend on forest resources in 12 municipalities of Western Honduras. The project is supporting local governments' capacity building and provides technical assistance in the establishment of municipal economic development strategies related to climate change and natural resource management. As of December 2021, the project had supported development of updated Municipal Development Plans and Municipal Investment Plans of eight participating municipalities. These updated plans address gender equality, natural resources management, climate change and economic empowerment of women and youth. In addition, 57 Forest and Farm Producer Organizations have developed

business plans; 779 (499 women) representatives trained in Market Analysis and Development to prepare business plans for their economic and productive initiatives 24 forest nurseries were established to restore and reforest 111 hectares of degraded land areas; and 414 MT of CO₂e avoided using climate-smart technologies and agricultural best practices, and 27,457 MT of CO₂e expected to be absorbed by reforestation activities. The project targeted 12 municipalities of Western Honduras. (Budget of 1,582,000 and 975,000 in 2021 and 2022 respectively)

Land4Lives

Indonesia

This project has been enhancing the capacities of provincial governments of South Sumatra, South Sulawesi and East Nusa Tenggara in Indonesia to plan and implement sustainable land-use policies (Provincial Spatial Plans) and Strategic Environmental Assessments (SEA) for the provinces' Long-Term Development Plans. The support of the Land4Lives facilitated the adoption of gender-sensitive approaches throughout the planning processes of both the spatial plan and the SEA by ensuring participatory and inclusive focus group discussions. These project activities helped the government in identifying the specific concerns of women, such as access to resources and services. The project also collaborates with the Women Empowerment Agency and the Development Planning Agency across the three provinces to co-develop policy briefs on financing climate change mitigation and adaptation programs with pro-poor and gender responsive indicators. The project targets 12 municipalities of western Honduras. (Budget of 1,582,000 and 975,000 in 2021 and 2022, respectively).

GERMANY

Leadership for Urban Climate Investment (LUCI)

Cross-region/Global

The Leadership for Urban Climate Investment (LUCI) is a multi-partner framework initiative that aims to connect existing initiatives along the whole value chain of urban infrastructure development to upscale impact through collaboration and addressing key structural constraints. To catalyze action, LUCI links about 20 initiatives².

<https://citiesclimatefinance.org/about/luci/>

LUCI'S targets aim to raise ambition and fill gaps in the value chain of subnational urban

² Current LUCI initiatives; CDP Matchmaker, FELICITY II, Subnational Climate Fund (SCF), Cities Finance Facility (CFF), City Climate Finance Gap Fund (Gap Fund), Urban Municipal Development Fund (AFDB UMDF), Urban ACT, GEF Urban Shift, Cities Development Initiative Asia (CDIA), International Municipal Investment Fund (IMIF), CICIJA, ICLEI Transformative Action Program (TAP), Cities4Forests, Global Infrastructure Facility (GIF), EBRD Green Cities Program, Resilient City Investment Funds, CPI Global Innovation Lab for Climate Finance, MDB Alliance for Subnational Development Banks, SIF SOURCE Platform, WB City Resilience Program

climate finance by 2025.

TARGET 1: 2,000 cities to strengthened capacities in project preparation. (Progress: 884)

TARGET 2: 1,000 climate smart urban projects are bankable (Progress: 190)

TARGET 3: 1,000 climate smart urban projects are linked to finance (Progress: 277)

TARGET 4: 100 climate smart urban projects successfully utilized new financing mechanisms (Progress: 29)

Good Practice

The City Climate Finance Gap Fund: Early-Stage Project Support Podgorica, Montenegro

The City Climate Finance Gap Fund, one central initiative of LUCI, is the first global fund dedicated to supporting cities in the very early stages of project development, aiming to unlock 4 billion EUR of investment off a target 100 million EUR budget (core donors: Germany and Luxemburg). In Podgorica, The Gap Fund is supporting the city in mapping relevant public buildings to help identify which ones could be suitable for green roofs combined with facades to improve energy efficiency in buildings and increase the permeability of surfaces in public spaces. Cities can apply directly for early-stage project support or learn more through networks like GCoM, C40, and ICLEI.

<https://www.citygapfund.org/>

Cities Climate Finance Leadership Alliance (CCFLA)

Cross-regional/Global

The Cities Climate Finance Leadership Alliance (CCFLA) is a multi-level and multi-stakeholder coalition aimed at closing the investment gap for urban subnational climate projects and infrastructure.

CCFLA provides a platform to convene and exchange knowledge as well as enhance coordination among all relevant actors dedicated to urban development, climate action, and/or financing.

The CCFLA has over 80 members including city networks, financial institutions, policy and research organizations, think tanks, etc. In 2022, CCFLA produced 15 knowledge products: 5 reports, 3 policy briefs, 4 tools, and 3 blog posts. Secretariat staff spoke at more than 30 external city climate sessions in 2022 and convened stakeholders at 4 major international climate finance gatherings, and the CCFLA Annual Assembly. The 2022 Highlights and Impact Report outlines the progress and key milestones achieved in 2022, and highlights members' knowledge products and case studies.

<https://www.international-climate-initiative.com/en/project/support-to-the-cities-climate->

[finance-leadership-alliance-22-i-482-global-a-ccfla/](https://citiesclimatefinance.org/)
<https://citiesclimatefinance.org/>
<https://citiesclimatefinance.org/wp-content/uploads/2023/02/CCFLA-2022-Highlights-and-Impact.pdf>

Good Practice

The 2021 State of Cities Climate Finance Report examines the current state of urban climate investment, the barriers to reaching the needed investment levels, and the steps to overcoming these challenges. Produced by the Cities Climate Finance Leadership Alliance (CCFLA), the report contributes to CCFLA's mission to mobilize city level climate finance at scale by 2030. The report also contributes to the Leadership for Urban Climate Investment framework initiative hosted by CCFLA, which aims to create a strong global architecture for subnational climate finance and tracking.

<https://citiesclimatefinance.org/publications/2021-state-of-cities-climate-finance/>

US

Bureau of Energy Resources' (ENR) Smart Cities Program

Bangkok, Thailand and Kuala Lumpur, Malaysia

In support of the US-ASEAN Smart Cities Partnership (USASCP), ENR is working with Bangkok and Kuala Lumpur on smart grid modeling and digitalization tools to help policymakers develop a roadmap to improve renewable energy integration and more efficiently manage the energy transition to lower carbon technologies and to achieve net-zero goals.

For instance, "The USASCP's Smart Cities Business Innovation Fund (BIF) finances net zero and low carbon solutions to urban challenges on the sub-national level. Capitalized at US\$1 million, BIF funded six urban solutions providing up to USD300,000 per solution. In its inaugural call for proposals, the BIF received 72 proposals totaling USD14 million in demand, demonstrating a clear need for sub-national financing.

<https://www.state.gov/u-s-asean-smart-cities-partnership-usascp-sharing-expertise-between-cities-to-benefit-the-people-of-asean/>

<https://www.usascp.org/about/partners/>

ENR's Flexible Resources Initiative (FRI)

India

The Bureau of Energy Resources (ENR), together with the U.S. Department of Energy,

Lawrence Berkeley National Laboratory, collaborates with a range stakeholder of Government of India to conduct a comprehensive modeling exercise to assess a least-cost pathway for India's power sector through 2030 at the national level and in four key states. As a follow-on to FRI, to help India meet its ambitious renewable energy target of 500 GW by 2030, the support will include an assessment of key operational and grid reliability risks, regulatory and policy strategy recommendations, and alignment of state-level power sector investment planning with national renewable energy targets to help India rapidly accelerate renewable energy capacity targets.

<https://2017-2021.state.gov/united-states-and-india-launch-flexible-resources-initiative-growth-through-clean-energy/>

Accelerating India's Renewable Energy Target (ENR) cross-cutting

Indonesia and Sri Lanka

Just Energy Workforce Transition project will help develop a jobs collection methodology for the national and subnational governments of Indonesia and Sri Lanka to inform policy decisions on the transition from coal to clean energy.

ENR's Just Energy Workforce Transition Project

Indonesia and Sri Lanka

Under the Climate Information Services Initiative, the US plan to coordinate our collective resources to support early warning systems in the Indo-Pacific, including through the Pacific-led Weather Ready Pacific initiative and the longstanding leadership of the Pacific Meteorological Council. The Just Energy Workforce Transition project will help develop a jobs collection methodology for the national and subnational governments of Indonesia `ting with the PICs

The US supports early warning systems in the Indo-Pacific, including through the Pacific-led Weather Ready Pacific initiative and the long-standing leadership of the Pacific Meteorological Council. USAID is the US lead for this effort, which is coordinated by IA. It will lead to significant subnational efforts.

<https://www.whitehouse.gov/briefing-room/statements-releases/2023/05/20/quad-leaders-joint-statement/>

US-India Clean Energy Finance Task Force

India

Under the U.S.-India Clean Energy Finance Task Force, the Bureau of Energy Resources (ENR) worked with Smart Power and the Council on Energy, Environment and Water to implement a utility-led, community-based demand aggregation pilots based on a U.S. business model for solarized campaigns tailored to India's context. The Task Force team

develop a Solarize Campaign Guidebook based on the report of the Delhi-based Solarize Campaign.

<https://www.ceew.in/publications/solarise-delhi-creating-demand-for-residential-rooftop-solar-india>;

<https://www.ceew.in/publications/guide-to-organise-solarise-campaigns-for-rooftop-solar-indian-homes>

Program for Local and Urban Sustainability (PLUS)

Cross-regional/Global

The Program for Local and Urban Sustainability (PLUS) is working with USAID partner countries to develop more sustainable, equitable, healthy, and prosperous cities by advancing five objectives: 1) Advance net-zero systems; 2) increase urban resilience; 3) reduce pollution and waste; 4) improve local governance and equitable access to services; and 5) Mainstream inclusive green jobs. PLUS currently supports cities in Indonesia, Peru, El Salvador, Colombia, Trinidad and Tobago, Uzbekistan, and India.

<https://urban-links.org/project/plus/>

Asia Resilient Cities (ARC)

India, Bangladesh, Kyrgyzstan

The newly launched and co-designed Asia Resilient Cities (ARC) will address cross-cutting urban development challenges in secondary cities in Asia by promoting sustainable urban growth, supporting resilient, low-carbon urban infrastructure; and integrating climate change and environmentally-conscious approaches.

<https://www.jsi.com/resource/asia-resilient-cities/>

3. Finance

FRANCE

AFD Support to resilient urban development

Mianyang (China)

The French Development Agency (AFD) encourages resilient urban development (disaster risk reduction, biodiversity conservation, and nature based solutions (e.g. sponge city projects in Mianyang, China)

<https://www.afd.fr/en/carte-des-projets/sponge-city-rethinking-water-resource-management-hedong-district-mianyang>

AFD Project on solid waste management

Conakry (Guinea)

AFD is promoting projects to reduce GHG emissions (e.g. structuring Solid Waste Management value chain in Conakry, Guinea)

GERMANY and LUXEMBOURG

City Climate Finance Gap Fund

Cross-region/Global

(early stage project preparation)

The City Climate Finance Gap Fund provides direct support at an early stage of project preparation to cities in low- and middle-income countries that have already made commitments in line with the Paris Agreement. The City Climate Finance Gap Fund, or the Gap Fund, provides early-stage technical assistance to cities for low-carbon, climate-resilient urban development plans and projects. The fund has €105 million in capital, which could unlock a potential €4 billion in investments.

As of September 2023, the Gap Fund has approved technical assistance (TA) to 189 cities worldwide to transform their climate ambitions into finance-ready projects. The supported cities are located in Africa, Eastern and South-Eastern Europe, Asia and the Pacific, and Latin America.

<https://www.international-climate-initiative.com/en/project/city-climate-finance-gap-fund-i-world-bank-19-i-411-global-m-gap-fund-i/>

<https://www.international-climate-initiative.com/en/project/city-climate-finance-gap-fund-ii-eib-20-i-419-global-m-gap-fund-ii/>

<https://www.citygapfund.org/>

Good Practice

A number of TA assignments are nearing or have been completed, including An analysis of technological options for biogas that could be produced by a small-scale anaerobic digester at the Port Vila Central Market, Vanuatu, together with a cost-benefit analysis to identify the most efficient solution. In Uganda, the Gap Fund is supporting, among other things, a comprehensive assessment of the available feedstock for organic waste recovery facilities. In Prishtina, Kosovo, an Urban Performance Tool evaluated the city's current sustainability and developed three urban growth scenarios for 2040 to compare the possible trajectories that the city could take in the next two decades.

<https://www.citygapfund.org/story/city-climate-finance-gap-fund-aims-expand-technical-assistance-new-cities>

GERMANY

Low-carbon Investment - Cities Advisory Facility - FELICITY II

Mitigation, Ukraine, Uzbekistan, Kazakhstan, Armenia and Moldova

(enabling environment, project preparation and linking to finance)

FELICITY (Financing Energy for Low carbon Investment - Cities Advisory Facility) is a project preparation facility implemented by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and financed by the German International Climate Initiative (IKI) of the Federal Ministry for Economic Affairs and Climate Action (BMWK), between 2017 and 2026. FELICITY works in close cooperation with the European Investment Bank (EIB) to support urban investment projects that significantly contribute to sustainable development and climate change mitigation. FELICITY offers technical assistance to cities in designing and structuring their infrastructure investment projects. Since 2017, FELICITY's support to cities has developed the potential to leverage EUR541 million. This is achieved through low-carbon project pipelining and preparation, capacity development for cities and national intermediaries such as national development banks (NDBs), policy recommendations on specific national framework conditions, and the development of knowledge networks for climate finance projects.

To reduce barriers to the preparation of finance-ready projects, the FELICITY program supports the preparation and implementation of low-carbon infrastructure projects in the Eastern Partnership countries (Ukraine, Georgia, Armenia, Moldova) and Central Asia (Uzbekistan, Kazakhstan). It focuses on two sectors in the partner countries: energy efficiency in buildings and water and wastewater. The program is leading to transformative changes in the implementation of climate plans (NDCs) at the sub-national level, where selected countries face similar challenges in terms of financing and technical capacity to implement climate change mitigation projects. The selected countries benefit from an integrated approach that combines the financing expertise of the European Investment Bank with GIZ's technical assistance and capacity development. Total budget for the current project phase, FELICITY II, from 2022 to 2026 is EUR 20,000,000.

<https://www.international-climate-initiative.com/projekt/felicity-ii-oestliche-partnerschaft-und-zentralasien-programm-21-i-387-global-g-felicity-ii-east/>

FELICITY: Sustainable solutions for cities (eib.org)

National Development Banks for Urban Climate Action Program (NUCA)

Cross-region/Global (Brazil, Indonesia, Colombia, Mozambique, South Africa)

National Development Banks for Urban Climate Action Program (NUCA) aims to strengthen NDBs' urban financing capacities and products. National development banks (NDBs) are well positioned to support cities' climate-smart projects - they often have long-standing relationships with the local public and private sectors, can provide local currency funding at attractive financial rates, and usually also offer support in the form of guarantees or grants for technical assistance. However, urban climate finance flows from NDBs remain limited - barriers such as a lack of climate-related expertise on the part of both cities and financial institutions, and insufficient knowledge and skills on derisking mechanisms to leverage private finance, prevent scaling up. The NUCA program will support NDBs to institutionalize urban climate finance, support NDBs and cities to jointly create a pipeline of lighthouse projects financed through a combination of public and private instruments and foster global knowledge exchange.

The 2023 budget is EUR 38,316.

Reporting to SI 1 - Mitigation GHG emissions reduced or carbon stocks enhanced directly or indirectly by IKI project measures; SI 3 - Adaptation Number of people supported by IKI projects to better adapt to the effects of climate change; SI 4 — Capacity People Number of people directly supported by IKI projects through networking and training to address climate change or conserve biodiversity; SI 5 - Leveraged Finance Volume of private and/or public finance leveraged for climate action or biodiversity purposes; target values still to be determined (project expected to start in Jan 2024).

<https://www.international-climate-initiative.com/en/project/enhancing-the-strategic-role-of-national-development-banks-as-drivers-of-low-carbon-climate-resilient-urban-infrastructure-investments-in-developing-and-emerging-economies-nuca-22-i-493-global-a-ndbs-for-urban-climate-action/>
<https://www.idfc.org/news/idfc-climate-facility-iki-nucap-closing-of-the-country-consultations-and-upcoming-meeting-in-berlin/>

Transformative Urban Mobility Initiative (TUMI)

Cross-regional/Global

TUMI (Transformative Urban Mobility Initiative) is the leading global implementation initiative on sustainable mobility formed through the union of 11 prestigious partners. We are united in one goal: changing mobility for the benefit of people and the environment, with a view to the future. With TUMI, the German Federal Ministry for Economic Cooperation and Development (BMZ) is supporting climate-friendly, inclusive, safe and affordable mobility in cities. TUMI is funded by BMZ and implemented by GIZ in collaboration with all TUMI partners.

- TUMI E-Bus Mission Cities: Delhi, Ahmedabad, Mumbai, Bangalore, Pune (India); Salvador, Rio de Janeiro, Sao Paulo, Campinas, Curitiba (Brazil); Barranquilla, Valledupar,

Bogotá (Colombia); Monterrey, Guadalajara, Mexico City (Mexico); Jakarta (Indonesia); Nairobi (Kenia); Durban (South Africa)

- TUMI Adaptation Lab: Ho Chi Minh City (Vietnam)
- TUMI Data Pilot Cities: Bogotá (Colombia); Sao Paulo, Fortaleza (Brazil); Cuenca (Colombia); Mexico City (Mexico); Kigali (Ruanda)
- Move Yaoundé (EU co-financed): Yaoundé (Cameroon)

transformative-mobility.org

GERMANY, FRANCE, the UK and the US

C40 Cities Finance Facility

Cross-region/Global

The C40 Cities Finance Facility (CFF), implemented by GIZ and C40 Cities, is jointly funded by USAID and the governments of Germany, France, and the UK. It supports partner cities to develop finance-ready climate change mitigation and adaptation projects and link them to finance, while also strengthening the institutional capacity of city administrations to enable future scale-up and replication.

The CFF is a PGII Flagship Initiative of the G7 Partnership for Global Infrastructure and Investment. The CFF is also a UNFCCC award-winning Project Preparation Facility that focuses on three components: preparing climate relevant infrastructure projects for financial readiness; linking projects to finance; and replicating and up-scaling projects, proven approaches and instruments. The CFF focuses on the sectors of mobility, renewable energy, waste management, and nature-based solutions, providing benefits such as employment opportunities, improved public health, and social equity. The administrations of CFF's partner cities are in the lead at all stages of the project development and are responsible for all decisions. The CFF support empowers city administrations to prepare finance ready infrastructure projects and to access the most suitable financing solutions, including through the preparation of necessary technical, legal and commercial studies; city-led learning and training events; on-the-job training; peer-to-peer exchanges; the establishment of interdepartmental decision-making structures; and mainstreaming equity and inclusion in all stages of the project development.

The CFF is expected to reduce over 7.5 million metric tons of greenhouse gas emissions in 30 cities across Asia, Africa, and Latin America, increase the resilience of 2 million people to climate change, and leverage US\$1 billion in climate finance investments by 2025. It has further leveraged US\$330 million in public and private finance by March 2023, with an additional US\$340 million identified to date (March 2023).

<https://www.c40cff.org/>

Good Practice

The C40 City Finance Facility (CFF) supports cities through technical assistance to develop cities' sustainability priorities into bankable investment proposals and linking them to finance, in collaboration with C40 Cities and GIZ. In Jakarta, the CFF is supporting the city to implement an operational trial fleet of 100 e-buses in the network of TransJakarta, which will contribute to Jakarta's target of promoting public transport mode share to 60% as well as to 100% electrify TransJakarta's fleet in 2030."

<https://www.c40cff.org/projects/jakarta-electric-bus>

GERMANY, SPAIN and EU

Covenant of Mayors in Sub-Saharan Africa (CoM SSA)

Africa

Since 2015, the Covenant of Mayors in Sub-Saharan Africa (CoM SSA) has been a major catalyst for local climate action in the region, with political commitment from over 350 local governments. CoM SSA aims to support local governments in moving from climate planning to implementation, with a focus on unlocking climate finance at the local level. Funded by the EU, Germany and Spain, and implemented jointly by GIZ, AFD, EF and AECID, CoM SSA is a European Union (EU) action that supports the external dimension of the European Green Deal, as the global challenges of climate change and environmental degradation require a global response. At the same time, CoM SSA moves to strengthen the Africa-EU partnership and supports Agenda 2063 of the African Union Commission.

<https://comssa.org/en/>

JAPAN

Clean Cities Partnership Program (C2P2)

Cross-regional/Global

Under Japan's G7 presidency in 2023, Ministry of the Environment, Japan and Japan International Cooperation Agency (JICA) launched a new program, the Clean Cities Partnership Program (C2P2) which aims to mobilize multi-stakeholder engagement in target cities and provide comprehensive and synergistic support to the urban agenda, including climate change, environmental pollution and circular economy.

UK

NDC Partnership

Cross-regional/Global

The United Kingdom, alongside Rwanda, co-chairs the Nationally Determined Contribution (NDC) Partnership.

The NDC Partnership brings together 120 countries and 80 institutions. Formed after the signing of the Paris Agreement, the Partnership provides a platform to coordinate and catalyze support and finance for developing countries' climate priorities (as set out in countries' Nationally Determined Contributions - NDCs). Germany supports the NDC Partnership both financially and politically..

Developing country members request support for capacity building, technical assistance and project development/financing for climate action through the Partnership, which are then responded to by donor and implementing members. Through this the Partnership supports countries to effectively implement their NDC commitments and access finance, leading to ambitious climate action and enhancing sustainable development.

The NDC Partnership has over 200 members, including 120 country members. A full list of members can be found here: <https://ndcpartnership.org/members>

Good Practice

The Partnership is a proven platform for reducing bureaucracy and increasing the speed of climate finance for technical assistance. An independent evaluation concluded the Partnership is “a neutral and open platform for member countries to access support for NDC enhancement and implementation and to share experiences and lessons.” Moreover, the evaluation report noted, “The Partnership’s operational model and approach is effective and efficient. Support for coordination, complementarity, and coherence for climate action, at global and national levels, is a key value added of the Partnership.”

<https://ndcpartnership.org/toolbox/good-practice-database>

Urban Climate Action Program (UCAP)

Cross-regional/Global (Africa, Latin America and South East Asia)

The Urban Climate Action Program (UCAP) is a £27.5 million fund that works with cities in developing countries to implement low-carbon urban infrastructure projects, plans and policies. UCAP supports megacities to mobilize technical and political leadership for net

zero. The program operates by embedding city advisors in partner city administrations to drive political ambition and technical capability for climate action. This includes Climate Action Implementation delivering high-impact infrastructure projects and mainstreaming climate action throughout city planning and decision making, and Cities Finance Facility, a multi-donor project preparation facility supporting cities to develop finance-ready low-carbon infrastructure projects.

The Climate Action Implementation component of the program supports 15 megacities in implementing their net zero climate action plans.

The program is part of the UK's International Climate Finance Strategy:

<https://www.gov.uk/government/publications/uk-international-climate-finance-strategy>

Green Cities and Infrastructure Program (GCIP)

Drawing on expertise from across the UK government and the private sector, the £48 million Green Cities and Infrastructure Program (GCIP) will deliver low-carbon, climate-resilient infrastructure, and support cities in lower income countries to become hubs of innovation while bolstering sustainable economic growth.

<https://www.gov.uk/government/news/48m-boost-to-improve-infrastructure-in-lower-income-countries>

Sustainable Urban Economic Development (SUED)

Cross-cutting, Kenya

The Sustainable Urban Economic Development (SUED) is a £60 million, five-year program (2018-2024) that aims to create climate-resilient, inclusive urban economic growth in Kenya's fast-growing municipalities. This will be achieved through supporting municipalities to develop sustainable urban economic plans, providing capacity building for the municipality and county, improving investment in climate reforms, drawing in investment for critical climate-resilient infrastructure and value chain projects, and providing up to £30 million in seed funding.

The program is working with 10 municipalities in Kenya.

<https://devtracker.fcdo.gov.uk/projects/GB-COH-3799145-781-15006KE/summary>

US

Bureau of Energy Resources' (ENR) Smart Cities Program (repeating)

Climate Resilient Cities

Philippines

The Climate Resilient Cities project (US\$15 million) will help cities in the Philippines adapt to, mitigate, and withstand the impacts of climate change by increasing their access to

climate finance and resilience-building tools.

Through this project, USAID will support local government units and other stakeholders to better understand, use, and disseminate climate information to local communities. The project will also help cities and non-governmental organizations access climate finance to build community resilience and contribute to the economic and social development of communities, as well as support natural climate solutions that increase the resilience of cities to the impacts of climate change.

<https://www.usaid.gov/philippines/press-release/usaids-launches-750-million-project-support-climate-resilience-philippines>

EU

Mission Innovation: Urban Transitions

Cross-regional/Global

Mission Innovation is a global initiative to catalyze action and investment in research, development, and demonstration to make clean energy affordable, attractive, and accessible to all in this decade. This will accelerate progress towards the Paris Agreement goals and pathways to net zero. The Urban Transitions Mission will work with a cohort of 50 ambitious cities around the world to demonstrate integrated pathways towards holistic, people-centered urban transitions built around clean energy and innovative net zero carbon solutions. By 2030, these pathways will be validated by an additional cohort of 250 cities, inspiring cities in all regions of the world on their journey to decarbonization. The Mission has launched an open call for cities to join the Urban Transitions Mission Cities Cohort. A first cohort of 50 cities will engage at the end of the selection process in late 2022, while a second cohort of 250 cities will be selected and engaged in a subsequent call in 2024.

<https://explore.mission-innovation.net/mission/urban-transitions/>

Good Practice

MI Call 22

60 million EUR funding for transnational research and innovation projects addressing urban challenges to help cities in their transition towards climate neutrality and sustainability. The call covers challenges along three Transition Pathways: Positive Energy Districts (PED), the 15-Minute City (15mC) and Circular Urban Economies (CUE).

Cities and Climate in Africa (CICLIA) (repeating)

4. Capacity Building

GERMANY

Transformative Urban Coalitions (TUC)

Latin America (Mexico: León, Naucalpan - Brazil: Recife, Teresina - Argentina: Buenos Aires)

Bottom-up urban labs and stakeholder engagement, transformative research and new governance schemes - Transformative Urban Coalitions (TUC) aims to contribute to the zero carbon emissions by 2050 target by supporting cities in transforming their social, technological, and political structures towards more sustainable systems in order to realize their urban zero carbon goal. This project facilitates the establishment of Transformative Urban Coalitions in five Latin American cities to develop new strategies to address local challenges of urban development and inequality while reducing carbon emissions.

SI 1 – Mitigation: GHG emissions reduced or carbon stocks enhanced directly or indirectly by IKI project measures: Indirect effects / 440,313 tonnes CO₂e (Target) - SI 4 – Capacity people: Number of people directly supported by IKI projects through networking and training to address climate change or to conserve biodiversity: number of People: 115,000 (Target)

<https://urbancoalitions.org/en>

Good Practice

Villa 20 is a neighbourhood within Buenos Aires undergoing a participatory reurbanization process. The Buenos Aires Urban Lab works to complement this ongoing process with new ideas, connecting decarbonization with urban inequalities and climate justice.

<https://urbancoalitions.org/en/urban-labs/buenos-aires>

Urban-Act (repeating)

FELICITY II (repeating)

C40 Cities Finance Facility (repeating)

CoM SSA (repeating)

City Climate Finance Gap Fund (repeating)

UK

Sustainable Urban Economic Development (SUED) (repeating)

US

Clean Air Catalyst

Cross-regional/Global (Indore, India; Jakarta, Indonesia; Nairobi, Kenya)

The Clean Air Catalyst is working in Nairobi, Kenya; Indore, India; and Jakarta, Indonesia to build a common understanding of leading air pollution sources, identify solutions that address the root causes of pollution, and build a coalition to implement selected high-impact actions in the three cities. CAC will advance solutions that deliver climate, health and development co-benefits by prioritizing pollutants and pollution sources that disproportionately impact vulnerable populations and women, as well as focusing on solutions for pollutants and/or emitting activities that affect climate. Installation of reference-grade air monitoring equipment for PM 2.5 and black carbon in pilot cities, significantly expanding city air quality monitoring capacity; intensive communication campaign (e.g. 80 journalists trained) and stakeholder engagement (over 1,700 people trained on tools, approaches and/or methods to improve air quality and identify air pollution-climate linkages).

<https://urban-links.org/project/clean-air-catalyst/>

<https://www.cleanaircatalyst.org/>

5. Networking

CANADA

Global Carbon Pricing Challenge (GCPC)

Cross-regional/Global

The Global Carbon Pricing Challenge (GCPC) aims to triple the coverage of carbon pricing around the world to reach 60% of global greenhouse gas emissions by 2030. The GCPC is a partnership of carbon pricing champions committed to supporting the expansion of carbon pricing by strengthening domestic systems and supporting jurisdictions in developing new pricing systems. Current GCPC partners include Canada, Chile, Germany, Republic of Korea, New Zealand, Norway, and the United Kingdom. Through a Technical Working Group, the partners share carbon pricing experiences and technical advice with jurisdictions considering carbon pricing or interested in learning more.

Japan

City-to-city Collaboration Program for Zero-carbon Society (repeating)

SMART JAMP

Asia

Smart JAMP means that Smart City supported by Japan ASEAN Mutual Partnership. Ministry of Land, Infrastructure, Transportation and Tourism (MLIT) supported the followings.

- (a) Conducting Feasibility Studies contributing to the overseas development of smart cities.
- (b) Preparing investments and loans for overseas smart city projects.
- (c) Ensuring support structures consisting of Embassies, JICA, JETRO and JBIC offices in various countries.
- (d) Japan Association for Smart Cities in ASEAN (JASCA) website shares information on Smart JAMP projects, good practices and technologies of Japanese companies, as well as to enable business matching.

<https://www.jasca2021.jp/>

Good Practice

MLIT supported a project by Japanese companies to promote the use of public transportation in Brunei, including a proposal for a bus operation management system and a demonstration experiment, through the Smart JAMP.

US

Cities Forward

Latin America and the Caribbean*

The Cities Forward program, a collaborative partnership of the U.S. Department of State, ICLEI-Local Governments for Sustainability, Resilient Cities Catalyst, and the Institute of the Americas, provides peer-to-peer exchange, capacity building, and diplomatic engagement, all focused on implementing projects that solve critical urban challenges around sustainability, inclusivity, and resiliency.

This transformative program will help cities in Latin America and the Caribbean (LAC) create sustainable, inclusive, and resilient futures with knowledge sharing with U.S. cities.

<https://icleiusa.org/cities-forward/>

<participating cities>

- Recipients include 12 LAC cities paired with 12 US cities shown below.
- Montego Bay, Jamaica + Hoboken, New Jersey, United States
- Guatemala City, Guatemala + Dallas, Texas, United States
- Cartagena, Colombia + Denver, Colorado, United States
- Cali, Colombia + Baltimore, Maryland, United States

- Fortaleza, Brazil + Hawaii County, Hawaii, United States
- Rosario, Argentina + Chattanooga, Tennessee, United States
- Freeport, The Bahamas + Coral Springs, Florida, United States
- Manaus, Brazil + Stockton, California, United States
- Mérida, Mexico + Austin, Texas, United States
- Ambato, Ecuador + Philadelphia, Pennsylvania, United States
- Renca, Chile + Evanston, Illinois, United States
- Hermosillo, Mexico + Dubuque, Iowa, United States

EU

Global Covenant of Mayors (GCoM)

Cross-region/Global

The Global Covenant of Mayors (GCoM) is the largest global alliance of city climate leadership, uniting more than 12,500 cities and local governments and more than 100 supporting partners on five continents. GCoM serves cities and local governments by mobilizing and supporting ambitious, measurable and planned climate and energy action in their communities, working with city/regional networks, national governments and other partners to achieve a net zero vision. Launched the City Climate Finance Gap Fund with the governments of Germany and Luxembourg (see above). GCoM has 12,500 signatories in 144 countries representing over 1 billion people. Based on current targets and actions, GCoM cities could collectively reduce global emissions by 2.3 GtCO₂e per year in 2030 and 4.1 GtCO₂e in 2050 compared to a business as usual (BAU) trajectory.

<https://www.globalcovenantofmayors.org/>

International Urban Regional Cooperation Program (IURC)

Cross-region/Global

City-to-city collaboration between EU cities and cities worldwide. IURC leads and develops a form of decentralized international urban and regional cooperation whose main axes of activity are two-fold: sustainable urban development and innovation in key partner countries and regions.

<https://www.iurc.eu/>

6. Partnership among G7 Members

CANADA and UK

Powering Past Coal Alliance (PPCA)

Cross-regional/Global

Canada and the United Kingdom co-chair the Powering Past Coal Alliance (PPCA), which is the driving force behind the global effort to phase out unabated coal power. France, Germany and Italy are also members. Coal remains the single biggest contributor to human-created climate change. Keeping 1.5 degrees Celsius requires an immediate end to the building of new unabated coal power plants, rapid scaling up of clean power, and the retirement of existing coal fleets in advanced economies by 2030 and globally by 2040. The PPCA helps amplify the efforts of subnational members to phase out unabated coal power generation, including by highlighting their work through reports and events, as well as sharing knowledge to support the transition from coal to clean power systems. To date, the PPCA includes more than 165 members, including national and subnational governments, businesses, and financial institutions. The PPCA has 49 subnational members across 13 countries. We are also looking towards more local governments from around the world to join the PPCA.

<https://poweringpastcoal.org/>

Good Practice

In Alberta, Canada, where coal used to provide over 80% of electricity, coal power will be phased out by the end of 2023 – seven years ahead of target and almost 40 years sooner than predicted. Chungnam, South Korea's coal heartland, was the first East Asian local government to include coal phase-out policies in its 2050 Carbon Neutrality Strategy. Units 1 and 2 of the Boryeong coal power plant, for example, were shut down in 2020, two years ahead of the national government's schedule.

<https://poweringpastcoal.org/news/powering-past-coal-2022/>

JAPAN and US

Global Subnational Zero Carbon Promotion Initiative

Based on the US-Japan Climate Partnership agreed between the leaders of Japan and the United States in April 2022, Japan is working with the United States to cooperate in accelerating the transition to a decarbonized society in developing countries, especially in the Indo-Pacific region. As part of these partnership activities, the Ministry of Environment, Japan and the Office of the Special Presidential Envoy for Climate, United States of

America, announced the "Global Subnational Zero Carbon Promotion Initiative" at the UNFCCC COP26. Based on the initiative, Japan and the United States are working together to promote global action to recognize, support, and accelerate subnational climate action in third countries, particularly in the Indo-Pacific region, to accelerate the transition to a decarbonized society.

Good Practice

Japan held a Zero Carbon City International Forum 2022 and 2023 for encouraging net-zero commitments and sharing leading cases of subnational climate actions, based on the Japan-US Global Subnational Zero Carbon Promotion Initiative.

JAPAN and EU

Japan EU Green Alliance

In May 2021, Japan and the EU announced the formation of a Green Alliance to accelerate the transition of both economies to become climate-neutral, circular, and resource-efficient in order to achieve green growth and their shared goal of achieving net-zero greenhouse gas emissions by 2050. The Alliance identified five priority areas, namely cooperation on energy transition, environmental protection, regulatory and business cooperation, research and development, and sustainable finance.

<https://www.mofa.go.jp/mofaj/files/100194620.pdf>

https://climate.ec.europa.eu/news-your-voice/news/eu-and-japan-commit-new-green-alliance-work-towards-climate-neutrality-2021-05-27_en

Good Practice

EU-Japan 100 Cities Event on Climate Action was organized in January 2023 by the Delegation of the European Union to Japan and Institute for Global Environmental Strategies (IGES) with aim to facilitate exchange between EU and Japanese cities through sharing good practices and solutions taken by leading cities, especially those cities selected under the initiatives to support subnational climate actions by the Japanese government and the EU, namely Japan's decarbonizing leading areas and EU mission for 100 climate-neutral and smart cities. 8 EU cities and 7 Japanese cities, and 4 companies and financial institutions from both countries shared their experiences and projects aiming to contribute local decarbonization.

Definition of Categories

1. POLICY/PLAN /STRATEGY

Technical support to the development of laws, regulations, procedure, standards, strategies, action plans, and others

2. INITIATIVE

Leading actions, process, or movements to achieve targets/goals or solve problems

3. FINANCE

Financial supports/incentives provided by national government or its representatives to overseas subnational governments, which includes loans, guarantees, tax, credits, investments, aid funds, grants, subsidies, and others.

4. CAPACITY BUILDING

Provision of educational program, trainings, seminars, twinning program targeted at overseas subnational government staff or any other equivalent staff. Sending consultants and advisors to provide know-how to overseas subnational governments with objective of human capacity, skills, and knowledge development can be also categorized under this category.

5. NETWORKING/INFORMATION EXCHANGE

Exchange of information and ideas among overseas subnational government staff or any other equivalent staff with special interest; platform to connect overseas subnational government staff or any other equivalent staff in a physical or virtual environment to facilitate knowledge and information and exchange and/or building solidarity.

6. PARTNERSHIP AMONG G7 MEMBERS

Partnership, alliance or any other initiative to collaborate among G7 members related to support to overseas subnational governments.



Annex 2.

Program and Participating Organizations

G7 Roundtable Meeting on Subnational Climate Actions Program

DAY 1

National support policies and programs in promoting subnational climate actions within their national boundaries

Thursday, 5 October, 2023

20:00-23:00 (JST)/13:00-16:00 (CEST)/7:00-10:00 (EDT)

20:00-21:50 (JST)/13:00-14:50 (CEST)/7:00-8:50 (EDT)	
Plenary 1. National supports to promote subnational climate actions within their boundaries	
This session aims to facilitate mutual understandings on the support that G7 members provide to promote and encourage subnational climate actions within their boundaries. G7 member countries requested to make an 8-minute presentation including the following topics: ➤ Background and process of the formulation of the national policies and programs ➤ Overview of the national policies and programs ➤ Future directions	
JST 20:00-20:05	Opening remarks by the Chair Masako OGAWA, Deputy Director-General Global Environment Bureau, Ministry of the Environment, Japan
20:05-20:13	Canada - Graeme Reed, Strategic Advisor, Environment, Lands and Water, Assembly of First Nations (AFN) - Jean Lemire, Commissioner for Climate Change and Northern and Arctic Issues, Government of Québec - Kate Rich, Assistant Deputy Minister, Policy Division, Government of Alberta
20:13-20:21	France - Fabien DOISNE, Policy advisor - Territorial action on climate, air and energy, Ministry of Environment - Lisa BOSTVIRONNOIS, Policy advisor - Mobilization of territories, Ministry of Environment
20:21-20:29	Italy Annalidia Pansini, Senior Expert on Climate Change, Ministry for the Environment and Energy Security
20:29-20:37	Japan - Nobuhiro KINO, Director, Office for Regional Decarbonization Policy, Ministry of the Environment - Nobuyoshi HASEGAWA, Director, International Affairs Office, Ministry of Land,

	Infrastructure, Transport and Tourism
20:37-20:52	Questions and Answers
20:52-21:00	The European Union Paula Pinho, Director, Directorate-General for Energy, European Commission
21:00-21:08	The United Kingdom - Katherine Wright, Deputy Director, Local Net Zero, Department of Energy Security and Net Zero - Mr. Phil Raines, Deputy Director, Domestic Climate Change, The Scottish Government - Alex Minshull, Sustainable City and Climate Change Service Manager, Bristol City Council
21:08-21:16	The United States Ambassador Nina Hachigian, Special Representative for City and State Diplomacy, Office of Global Partnerships (Video message)
21:16-21:24	Germany Leonhard Kähler, Senior Policy Officer, National Climate Protection Initiative (NKI) and Municipal Climate Protection, German Federal Ministry for Economic Affairs and Climate Action (BMWK)
21:24-21:40	Questions and Answers
21:40-21:50	Break
21:50-22:50 (JST)/14:50-15:50 (CEST)/ 8:50-9:50 (EDT)	
Parallel Sessions: Enhancement of national support policies and programs	
Parallel Session 1-1. Leveraging synergies	
The G7 Climate, Energy and Environment Ministers' Communiqué showed its commitment <i>"to leveraging synergies and preventing trade-offs as we pursue actions to address climate change, biodiversity loss, pollution, land degradation, energy crisis, to accelerate the clean energy transition, resource efficiency and circular economy and to achieve the UN 2030 Agenda and its Sustainable Development Goals."</i> The Communiqué also acknowledges <i>the vital role of subnational actors in realizing the transformation toward net-zero, climate-resilient, circular, and nature positive economies, furthering socioeconomic opportunities based on local capacity, needs and individual environmental conditions, and resolves to catalyze support for actions by subnational actors, encourage sharing best practices and promote city-to-city cooperation.</i> Subnational governments are closely connected to people's daily lives and play a vital role in offering a wide range of essential livelihood services. Their overarching goal is to tackle not just climate change, but also various social issues such as enhancing access to insurance services, establishing strong connections between urban and rural areas, fostering sustainable transportation systems. Additionally, they aim to address economic challenges such as creating decent work opportunities, endorsing local culture, and advancing sustainable industries. Consequently, the support extended from the national government to these subnational governments should contribute to the establishment of a sustainable socio-economic systems by addressing climate change. This session will explore key points to enhance practical subnational climate actions that	

address climate change, social and economic challenges in a synergistic matter.

Key Questions:

1. *What are some specific good practices of subnational actions that leverage synergy to address climate change, social and economic challenges?*
2. *What are the obstacles to addressing climate change, social and economic challenges with synergy?*
3. *What are the key points to facilitate specific subnational climate actions with synergy by national governments?*

JST 21:50-21:55	Introduction by Moderator Wolfgang Teubner, Regional Director of ICLEI Europe
21:55-22:05	Comments from speakers nominated by U7 - Marvin Rees, Mayor of Bristol City, the UK - Dario Nardellaz, Mayor of Florence City, Italy
22:05-22:30	Comments from G7 members
	Canada Jean Lemire, Commissioner for Climate Change and Northern and Arctic Issues, Government of Québec
	France Bénédicte JENOT, Deputy Head of the Climate Unit, in Directorate for European and International Action of the French Ministry for the Ecological Transition
	Germany Leonhard Kähler, German Federal Ministry for Economic Affairs and Climate Action (BMWK)
	Italy Annalidia Pansini, Senior Expert on Climate Change, Ministry for the Environment and Energy Security
	Japan Nobuhiro KINO, Director, Office for Regional Decarbonization Policy, Ministry of the Environment
	UK - Katherine Wright, Deputy Director, Local Net Zero, Department of Energy Security and Net Zero - Phil Raines, Deputy Director, Domestic Climate Change, The Scottish Government
	US Anthony Socci, Senior Lead on International Resilience & Adaptation Policy, Office of Global Affairs and Policy Office of International and Tribal Affairs, US Environmental Protection Agency

	EU Eero Ailio, Adviser, Energy Transition and Local Governance, Directorate-General for Energy, European Commission
22:30-22:50	Discussion for summary
Parallel Session 1-2. Mainstreaming climate actions in urban development and management including usage of digital technology	
The G7 Climate, Energy, and Environment Ministerial Communiqué stated that “We will continue to work with G7 ministers responsible for urban development on net-zero and resilience agenda.” The G7 Sustainable Urban Development Ministers gathered in Kagawa-Takamatsu in July 2023 to discuss contributions to climate change resilience, including the importance of improving the market environment to secure green spaces in cities, reorganizing sustainable urban structures, optimizing energy use in cities, and enhancing resilience by promoting proactive disaster management. The contribution of digital technology to efficient energy management was also discussed. Cities with high concentrations of population, assets, and industry also have high levels of active economic activity, which has a significant impact on climate change. In recent years, climate change has also caused more severe disasters around the world, increasing the importance of resilience. Therefore, it is important that the public and private sectors work together in G7 countries to actively engage in climate action for sustainable urban development. The G7 have been working on climate action in urban development for some time and need to be more proactive in this area. Recent advancements in digital technologies need to be taken into consideration when coming up with measures to address urban development issues. This session discusses how the G7 should work on climate action, including measures to address the rapidly developing digital technology. Key questions: 1. What are some good examples of climate action related to urban development, and what are the challenges for G7 to mainstream climate action into urban development? 2. There have been remarkable advances in technology in recent years, including DX. What are good practices and lessons learned in using such technology to address climate action? 3. It will be important for the public and private sectors to work together on climate action, but what kind of partnership is desirable for climate actions in urban development using advanced technologies?	
JST 21:50-21:55	Introduction by Moderator Tadashi Matsumoto, Head, Sustainable Development and Global Relations, Cities, Urban Policies and Sustainable Development Division, Organization for Economic Co-operation and Development (OECD)
21:55-22:05	Comments from speakers nominated by U7 - Arve Minna, Mayor, City of Turku, Finland - Céline Papin, Deputy Mayor of Bordeaux City, France

22:05-22:30	Comments from G7 members
	Canada • Ericha Moores, Senior Analyst, Infrastructure Canada (INFC)
	Italy • Giovanni Pineschi, Senior Urban Environment Expert-Agency for the Territorial Cohesion
	Japan • Sachio MUTO, Director, Urban Policy Division, Ministry of Land, Infrastructure, Transport and Tourism
	The United Kingdom • Joanna Averley, Chief Planner, Department of Levelling Up, Housing and Communities • Alex Minshull, Sustainable City and Climate Change Service Manager, Bristol City Council
	The United States • Raffi Balian, Senior Policy Advisor, US State Department, SPEC/EGC
22:30-22:50	Discussion for summary
22:50-23:00 (JST)/ 15:50-16:00 (CEST)/ 9:50 -10:00(EDT)	
Plenary 2. Summary	
	Parallel session summary by the moderators (2min.x 2) • Wolfgang Teubner, Regional Director of ICLEI Europe • Tadashi Matsumoto, OECD
	Reflection of the day from the Chair (Japan) Masako OGAWA, Ministry of the Environment, Japan

DAY2

International cooperative programs in promoting subnational climate actions beyond G7 member countries

Friday, 6 October, 2023

20:00-23:30 (JST)/13:00-16:30 (CEST)/7:00-10:30 (EDT)¥

20:00-21:50 (JST)/13:00-14:50 (CEST)/7:00-8:50 (EDT) Plenary 3. International cooperative programs in promoting subnational climate actions beyond G7 member countries	
This session aims to facilitate mutual understandings on existing international cooperative programs to facilitate subnational climate actions in non-G7 member countries. G7 member countries requested to make an 8-minute presentation including the following topics: ➤ Views on current state and challenges of subnational governments in developing countries ➤ Overview of international cooperative programs ➤ Flagship projects and idea for G7 cooperative actions ➤ Future directions	
JST 20:00-20:05	Opening remarks by the Chair (Japan) Masako OGAWA, Deputy Director-General Global Environment Bureau, Ministry of the Environment, Japan
20:05-20:13	Canada Jason van Wyngaarden, Senior Policy Analyst, Multilateral Affairs, Environment and Climate Change Canada (ECCC)
20:13-20:21	France Frédéric AUDRAS, Head of the Urban Development, Housing, Planning Division, Agence Française de Développement
20:21-20:29	Germany Michael Hackethal, Head of Division, Multilateral Cooperation, G7/G20; International Organizations, German Federal Ministry for Economic Affairs and Climate Action (BMWK)
20:29-20:37	Italy Annalidia Pansini, Senior Expert on Climate Change, Ministry for the Environment and Energy Security
20:37-20:52	Questions and Answers
20:52-21:00	Japan - Yoshinori SUGA, Director for Sustainable Infrastructure, Office of Director for International Cooperation for Transition to Decarbonization and Sustainable Infrastructure, Global Environmental Bureau, Ministry of the Environment - Nobuyoshi HASEGAWA, Director, International Affairs Office, Ministry of Land,

	Infrastructure, Transport and Tourism
21:00-21:08	The United Kingdom Alicia Forsythe, Head of Partnerships and Infrastructure Development, Foreign, Commonwealth and Development Office
21:08-21:16	The United States Arie Pals, Senior Advisor, Bureau of Western Hemisphere Affairs, Office of Economic Policy and Summit Coordination, US State Department
21:16-21:24	The European Union Eero Ailio, Adviser, Energy Transition and Local Governance, Directorate-General for Energy, European Commission
21:24-21:40	Questions and Answers
21:40-21:50	Break
21:50-22:50 (JST)/14:50-15:50 (CEST)/ 8:50-9:50 (EDT) Parallel Sessions: Advancing international cooperation by G7 national governments for subnational climate actions in non-G7 countries	
Parallel Session 2-1. Exploring opportunities for cooperative actions among G7	
The G7 Climate, Energy and Environment Ministers' Communiqué stated that <i>“with regard to our international cooperation in climate, energy, environment and disaster risk reduction, we will further explore ways to coordinate among G7 members to facilitate the transitions to achieve climate-resilient, nature-positive and sustainable development priorities and prospects of developing countries, guided by the 2030 Agenda for sustainable development, leaving no one behind.”</i> While there are many international cooperation programs and projects facilitating subnational climate action by G7 members, some subnational governments that are receiving support face the challenge of coordinating multiple assistance programs. G7 members have the opportunity to efficiently utilize their resources by leveraging their collective strengths. This session explores ways to enhance cooperative actions by G7 members to support subnational climate actions in non-G7 countries, and to encourage possible concrete cooperative actions that the members can facilitate building upon existing initiatives. Key questions: 1. What are some specific examples of synergies created between cooperation programs and projects among G7 members? What are the key points where synergies were achieved? 2. What impacts/benefits are you expecting from coordinated actions of G7 members in international cooperation programs? 3. What happens next? Are there any possible coordinated/cooperated actions that can be taken based on the existing initiatives?	
JST 21:50-21:55	Introduction by Moderator Giorgia Rambelli, Mission Director, Global Covenant of Mayors for Climate & Energy (GCoM)
21:55-22:05	Comments from speakers nominated by U7 (5min./each)

	• Hayato Shimizu, Mayor of Saitama City, Japan • Thomas Kufen, Mayor of Essen City, Germany
22:05-22:30	Comments from G7 members (max. 3 min./each)
	Canada • Jason van Wyngaarden, Senior Policy Analyst, Multilateral Affairs, Environment and Climate Change Canada (ECCC)
	Germany • Alice Kinne, Senior Policy Officer for Sustainable Urban Development, German Federal Ministry for Economic Affairs and Climate Action (BMWK)
	Italy • Annalidia Pansini, Senior Expert on Climate Change, Ministry for the Environment and Energy Security
	Japan • Yoshinori SUGA, Director for Sustainable Infrastructure, Office of Director for International Cooperation for Transition to Decarbonization and Sustainable Infrastructure, Global Environmental Bureau, Ministry of the Environment
	The United Kingdom • Alicia Forsythe, Head of Partnerships and Infrastructure Development, Foreign, Commonwealth and Development Office
	The United States • Emily Seen, Foreign Affairs Officer, US State Department, SPEC/EGC
	The European Union • Eero Ailio, Adviser, Energy Transition and Local Governance, Directorate-General for Energy, European Commission
22:30-22:50	Discussion for summary
Parallel Session 2-2. Integrated smart city development and user benefit	
The G7 Sustainable Urban Development Ministers Communiqué stated that <i>"We recognize that digitalization can contribute to economic, environmental, and social development and management of cities. It can also have a positive impact on mitigating climate change and promoting inclusion. We recognize that 'smart city approaches' can contribute to 'human-centered urban development' and provide equitable solutions for the diversity of people's needs and lifestyles."</i> Urban development must diversify to address multiple challenges such as concentration of population in cities, insufficient and inadequate infrastructure, traffic congestion, and increasing environmental burdens. To cope with these diverse challenges, expectations are growing for smart cities that utilize digital technology to solve these issues and realize sustainable urban development. Non-G7 countries, such as emerging economies that are urbanizing in line with population and economic growth, are also increasingly interested in the concept of a smart city, and it is necessary to respond to these needs. In promoting smart city development, it is necessary to consider how residents and users will benefit,	

such as how they will access improved living environments, improved mobility, tourism, regional revitalization, and disaster prevention, in addition to climate change mitigation.

The G7 countries are providing support for smart city development in their own countries as well as in non-G7 member countries. It is necessary to further strengthen international cooperation among the G7 to accelerate such support and improve benefits for residents and users. In this session, we will discuss how to develop smart cities, focusing on the benefits for residents and users.

Key questions:

1. *What are the needs of residents and users in developing a smart city, and how do the domestic needs of the G7 differ from the needs of cities in non-member countries?*
2. *In developing a smart city, how can we create a domestic mechanism to ensure that the needs of residents and users are met in terms of climate action?*
3. *What kind of international cooperation framework can be considered to support smart city development in non-G7 member countries?*

JST 21:50-21:55	Introduction by Moderator Bruno Dercon, Officer-in-Charge, UN-HABITAT Regional Office for Asia and the Pacific
21:55-22:05	Comments from speakers nominated by U7 (5min. /each) Lina Garcia, Director, United States Conference of Mayors, the US
22:05-22:30	Comments from G7 members (max. 3 min./each)
	Canada Ericha Moores, Senior Analyst, Infrastructure Canada (INFC)
	Germany Gudrun Schwarz, Senior Policy Officer for Smart Cities, German Federal Ministry for Housing, Urban Development and Building (BMWSB)
	Italy Sandra Gizdulich, Senior Urban Development Expert (SUDO) -Agency for the Territorial Cohesion
	Japan Sachio MUTO, Director, Urban Policy Division, Ministry of Land, Infrastructure, Transport and Tourism
	The United Kingdom Joanna Averley, Chief Planner, Department of Levelling Up, Housing and Communities
	The United States Anthony Socci, Senior Lead on International Resilience & Adaptation Policy, Office of Global Affairs and Policy Office of International and Tribal Affairs, US Environmental Protection Agency
22:30-22:50	Discussion for summary
22:50-23:00 (JST)/ 15:50-16:00 (CEST)/ 9:50 -10:00(EDT)	

Plenary 4. Summary	
	Parallel session summary by the moderators (2min.x 2) • Giorgia Rambelli, GCoM • Bruno Dercon, UN-HABITAT Regional Office for Asia and the Pacific Reflection of the day from the Chair • Masako OGAWA, Ministry of the Environment, Japan
23:00-23:30 (JST) 16:00-16:30 (CEST)/ 16:30-17:00 (EDT)	
Closing Session: Follow-up actions in 2023	
JST 23:00-23:25	Round of comments (2 minutes each) including expectations for future G7 activities in the subnational agenda, followed by short interaction. • Canada Jason van Wyngaarden, Senior Policy Analyst, Multilateral Affairs, Environment and Climate Change Canada (ECCC) • France Bénédicte Jénnot, Deputy Head of the Climate Unit, in the Directorate for European and International Action, the French Ministry for the Ecological Transition • Germany Alice Kinne, Senior Policy Officer for Sustainable Urban Development, German Federal Ministry for Economic Affairs and Climate Action (BMWK) • Italy Annalidia Pansini, Senior Expert on Climate Change, Ministry for the Environment and Energy Security • UK <i>Alicia Forsythe, Head of Partnerships and Infrastructure Development, Foreign, Commonwealth and Development Office</i> Joanna Averley, Chief Planner, Department of Levelling Up, Housing and Communities • US Daniel J. Ricchetti, Deputy Special Representative for City and State Diplomacy, U.S. Department of State, US State Department • EU Eero Ailio, Adviser, Energy Transition and Local Governance, Directorate-General, European Commission • Japan Yoshinori SUGA, Director for Sustainable Infrastructure, Office of Director for International Cooperation for Transition to Decarbonization and Sustainable

	Infrastructure, Global Environmental Bureau, Ministry of the Environment
JST 23:25-23:30	Closing remarks from the Chair Masako OGAWA, Deputy Director-General Global Environment Bureau, Ministry of the Environment, Japan

G7 Roundtable Meeting on Subnational Climate Actions

Participating Organizations

(including observers)

CANADA

Environment and Climate Change Canada (ECCC)

Infrastructure Canada (INFC)

Government of Québec

Government of Alberta

Assembly of First Nations (AFN)

Métis National Council

FRANCE

Ministry for the Ecological Transition

Ministry of Europe and Foreign Affairs

Agence Française de Développement

National Agency for Territorial Cohesion

GERMANY

Federal Ministry for Economic Affairs and Climate Action

Federal Ministry for Housing, Urban Development and Building

ITALY

Ministry for the Environment and Energy Security

National Agency for Territorial Cohesion

Ministry of Europe and Foreign Affairs

JAPAN

Ministry of Environment

Ministry of the Land, Infrastructure, Transportation and Tourism

UK

Department of Energy Security and Net Zero

Department for Business, Energy and Industrial Strategy

Department of Levelling Up, Housing and Communities

The Scottish Government

Bristol City Council

British Embassy in Japan

US

State Department, Subnational Diplomacy Unit

State Department, SPEC/EGC

Department of Housing and Urban Development

Environmental Protection Agency

EU

Directorate-General for Energy, European Commission

Directorate-General for Climate Action, European Commission

U7

Boudreaux City, France

Bristol City, the UK

Essen City, Germany

Florence, Italy

Saitama City, Japan

Turku, Finland

Federation of Canadian Municipalities

Japan Designated Cities Mayors Association

United States Conference of Mayors

International Organizations and Networks

UN-Habitat

Global Covenant of Mayors

Organisation for Economic Co-operation and Development (OECD)

ICLEI-Local Governments for Sustainability

Secretariat

Institute for Global Environmental Strategies (IGES)