

Low Carbon and Resilient Basic Services and Buildings

We boost low carbon action for urban mobility, energy, water and waste management and sustainable buildings. We work on concrete steps in cities to achieve global climate change mitigation, sustainable, resilient and inclusive urban development.

Our Projects and Tools

The Urban Electric Mobility Initiative (UEMI) aims to boost the share of electric vehicles across all modes and integrate electric mobility into a wider concept of sustainable urban transport that achieves a 30% reduction of greenhouse gas emissions in urban areas by 2030. UEMI's objective is to help phase out fossil fuelled vehicles and increase the share of electric vehicles (2, 3 and 4-wheelers) in the total volume of individual motorized transport in cities to at least 30% by 2030. The Initiative delivers tools and guidelines, generates synergies between e-mobility programmes and supports local implementation action in over 20 cities around the world.

www.uemi.net

Urban Pathways: The project promotes Low Carbon Plans for urban mobility, energy and waste management services, working on concrete steps in more than 20 cities towards maximum impact on global climate change mitigation efforts and sustainable and inclusive urban development. Urban Pathways offers a number of tools and on-line learning resources on mobility and energy. It is supported by the German Government.

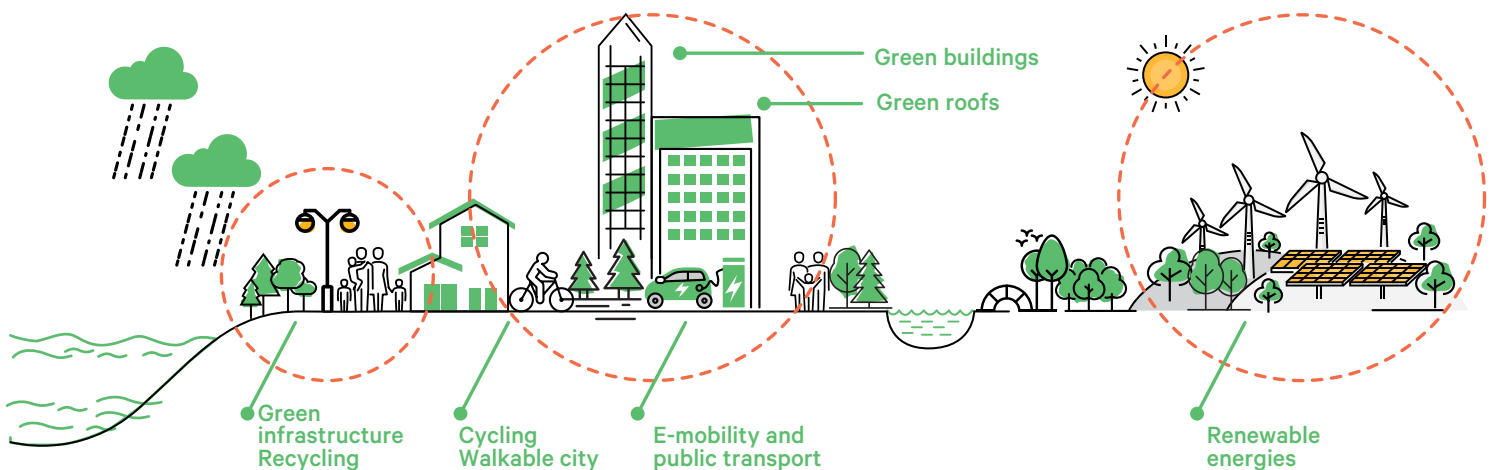
www.urban-pathways.org

I am **City**
Climate
Action

Addressing mitigation through low carbon infrastructure, services and buildings

- The design of today's transportation systems, buildings and other infrastructures will largely determine tomorrow's CO₂ emissions.
- Worldwide, transport as a whole is responsible for 23% of total CO₂ emissions from fuel combustion and road transport is responsible for 20%.
- Buildings and construction account for more than 35% of global final energy use and nearly 40% of energy-related CO₂ emissions. Since about 50% of the building stock that will exist in 2050 is yet to be built, this sector represents tremendous opportunities for mitigation through the use of low carbon technologies.
- Research suggest that "going green" in terms of infrastructure and buildings could cut future emissions half or about 10 Gt CO₂ per year from 2040 onwards—the same quantity that is currently being emitted by the United States, Europe and India together.

The City we need adopts renewable energies, low carbon infrastructure and buildings.



The Future Radar Project aims to advance innovative urban mobility solutions in partnership with the European Technology Platform ETRAC and the European Green Vehicle Initiative. It promotes dialogue and exchange between cities in Europe, Asia and Latin America on urban electric mobility solutions and developing implementation concepts for innovative e-mobility actions.

<https://www.etrac.org> • <https://egvi.eu>

The EMPOWER Project aims at substantially reducing the use of conventionally fuelled vehicles in cities through changes in driving behaviour as a way to improve urban traffic flows, increase air quality, reduce CO₂ emissions and oil consumption. In several European partner cities, EMPOWER explores the use of positive incentives delivered through smart phone applications to persuade people to make modest shifts in their transport choices. UN-Habitat facilitates international outreach and replication of the project in other regions.

The EMPOWER Toolkit brings together a range of knowledge, expertise and learning from the project to be used by all those involved in designing, implementing and delivering transport services to reduce the use of conventionally fuelled vehicles.

<http://empowerproject.eu>

Highlights

E-Rickshaws in Kochi, India

UN-Habitat partners with the city of Kochi to conceptualize and implement a pilot project of electric auto rickshaws. This includes cooperation with the public transport operator, local manufacturer of e-rickshaws and associations of auto rickshaws drivers. The project will help achieve the national objective to have 30% of vehicles run on electricity by 2030.

Mainstreaming Sustainable Social Housing in India

The MaS-SHIP project is meant to guide decision makers towards adopting more sustainable consumption and production patterns in the housing industry. MaS-SHIP informs on the best paths to create housing projects, provide decent employment, optimize the production and consumption of building materials, and reduce the environmental impact of the sector, namely carbon emissions from the whole supply chain.

As a Mayor, I have committed to only purchase zero carbon buses from 2020



My father has bought an electric car.



My city has regulations to enforce zero carbon buildings by 2030



Through the Urban Electric Mobility Initiative (UEMI) UN-Habitat promotes the use of electric vehicles to help achieve a 30 percent reduction of greenhouse gas emissions in urban areas by 2030.

UN-Habitat promotes energy efficiency in buildings in East Africa through capacity-building and knowledge transfer for low carbon technologies in the field of sustainable housing.

Rapid Planning – Sustainable Infrastructure and Environmental and Resource Management for Highly Dynamic Metropolises

Rapid Planning is an action oriented urban research project with the objective of developing and testing a rapid trans-sectoral planning methodology for supply and disposal infrastructure development in rapidly growing cities. Funded by the German Ministry for Education and Research, it is being implemented by a consortium of 12 universities and private research institutions. Case cities for the research include Da Nang (Vietnam), Kigali (Rwanda), Assiut (Egypt) as well as Frankfurt (Germany). The Rapid Planning suite of tools is currently under development. It is a new “metabolic” planning approach employing a trans-sectoral methodology with the common denominator of material and energy flows in cities as the basis for their infrastructure planning.

<http://rapid-planning.net/>

GEF Sustran East Africa: Promoting Sustainable Transport Solutions for East African Cities

The project aims to reduce growth of private motorized vehicles and decrease traffic congestion and greenhouse gas emissions in Addis Ababa (Ethiopia), Kampala (Uganda) and Nairobi (Kenya). The envisaged strategic response is to upgrade these cities’ transit systems by implementing improved non-motorized transport infrastructure and applying travel demand management while supporting transport policies. In each of the cities the project aims to establish a Bus Rapid Transport (BRT) demonstration corridor.

<http://gefsustran.sutp.org/>

Promoting Energy Efficiency in Buildings in East Africa: The project aims at promoting capacity building and knowledge transfer for energy access, efficiency and low-carbon technologies in the field of sustainable housing. Through design-build teaching method, a practical approach based on learning by experience, schools of architecture run design and construction studio courses which culminate in full-scale prototype buildings. Funded by the European Union and implemented by the Secretariat of the African, Caribbean and Pacific (ACP) Group of States.

SHERPA is a self-evaluation tool for project managers, communities, and other stakeholders involved in the planning, design, construction and assessment of housing projects. The tool assesses housing projects from the initial inception through the site selection and design process to the end of the life cycle. It also assesses the recyclability of the building materials used. SHERPA is supported by the One Planet Network and developed by UN-Habitat, CRATERRE-ENSAG, VTT Technical Research Centre of Finland and the University of Cambridge, in collaboration with the Kenya Slum Upgrading Programme, Yaam Solidarité and Architecture sans Frontières Nepal.

<https://unhabitat.org/sherpa/>

Principles of action

- Through a rapid and effective transition to sustainable energy systems, cities actively contribute to reducing domestic emissions of carbon dioxide. They can play a vital role in reducing the global carbon footprint from transport, energy, housing and other consumptions.
- Green paths include the construction of higher-density, energy-efficient housing, upgrading mobility systems through innovative public transit, car sharing, electric cars and bicycles.
- For emerging technologies to unfold their full potential in climate protection, policies must ensure that these technologies are actually replacing rather than just supplementing the older, dirty technologies.
- City leaders have a huge responsibility in making strategic choices toward greener pathways through upgrading existing infrastructures and introducing new mobilities and energies. Once infrastructure is in place, it determines long-term carbon emissions.

Partners



Federal Ministry
for the Environment, Nature Conservation
and Nuclear Safety

