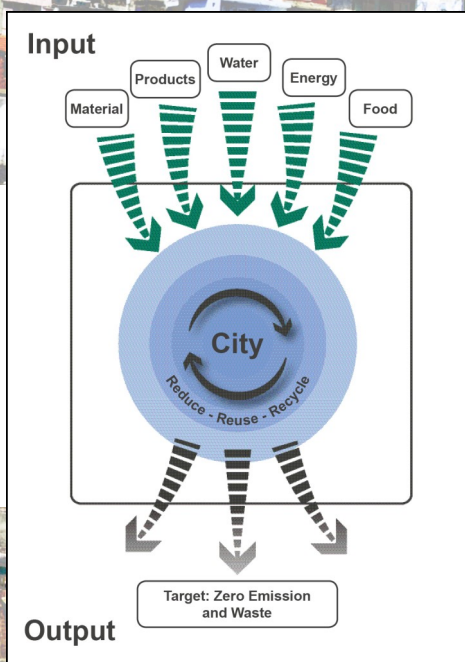


How can Cities decouple economic growth from resource use and its environmental impacts and find a balance between social, environmental and economic goals?



Resource Efficiency in Cities provides opportunities to address environmental and social challenges while creating major financial savings

Global Initiative for Resource Efficient Cities



Engine to Sustainability



What is Resource Efficiency?

Resource Efficiency is a key driver of success that promotes Sustainable Consumption and Production (SCP), facilitates a transition to a Green Economy and thus contributes to achieving global sustainable development. In cities, resource efficiency enhances the quality of life in urban areas by minimizing resource extraction, energy consumption and waste generation and while simultaneously safeguarding ecosystem services. UNEP defines resource efficiency from a life cycle and value chain perspective. This means reducing the total environmental impact of the production and consumption of goods and services, from raw material extraction to final use and disposal.

Why Resource Efficiency in Cities?

Over half of the world's population resides in cities, and up to 80% is projected for 2050. The conditions for urban inhabitants, in terms of employment, environment, health, education and overall quality of life not only depend on how urbanisation is planned and managed, but also how cities source, process and use resources. The decisions and actions needed to move our society towards more sustainable patterns of consumption and production will have to be decided and implemented, to a large extent, by cities. There are genuine opportunities for national and city leaders to contribute to sustainability by improving resource efficiency, reducing carbon emissions, minimizing environmental risks and enhancing ecosystems.

Cities occupy **3%** of land surface

Cities produce **50%** of global waste

Cities account for **60- 80%** of global GHG emissions

Cities consume **75%** of natural resources

Cities produce **80%** of global GDP



Inherent Returns for Cities of Greater Resource Efficiency:

- **Financial savings** - infrastructure services can be provided in a more cost effective manner when policies, programs and methods of service delivery use less natural resources to meet demands in urban centres.
- **Expansion of services with little or no increase in cost** – using available resources such as energy and water more efficiently allows cities to increase services while keeping budgets relatively flat-lined.
- **Reduced pollution levels** - efficient use of natural resources has a direct impact on the quality of the natural environment in urban areas and beyond.

What are the benefits of Resource Efficiency?

There is a strong link between quality of life in cities and how cities draw on and manage the natural resources available to them. Resource efficient cities combine greater productivity and innovation with lower costs and reduced environmental impacts, while providing increased opportunities for consumer choices and sustainable lifestyles. In addition, 'urban mining', the reduction of influx of resources by making better use of the existing stocks of materials available in the urban environment through increased recycling rates, is a strategy that can scale up these benefits. Resource efficiency is key for cities to contribute to local and global sustainability and offer at the same time high potential for financial savings.

High potential for savings through Resource Efficiency:

- Water savings globally through minor investment and behavioral change
- Energy savings potential in existing buildings through behavioral change and application of readily available and low-cost technologies.
- Investment required for urban infrastructure in the next 20 years: Greater resource efficiency -in water, waste, transport and energy- could generate significant savings by reducing infrastructure needs and operating costs.



30%

30-50%

USD 41 trillions



What does the Global Initiative for Resource Efficient Cities offer?

This Global Initiative for Resource Efficient Cities (GI-REC) seeks to connect the many different entities around the world working on Resource Efficiency, using UNEP's convening ability to mobilize partners and different constituencies from governments at both the national and local levels, civil society, business and industry and other major groups. The ultimate goal of the Global Initiative is to mainstream resource efficiency and sustainable consumption and production into policies and tools at the city level and to change citizens' and business' habits accordingly.

The **Global Initiative for Resource Efficient Cities** will provide a range of support to cities to assist with realizing the economic, social and environmental benefits of resource efficiency and SCP. The core activities include:

Research on Resource Efficiency

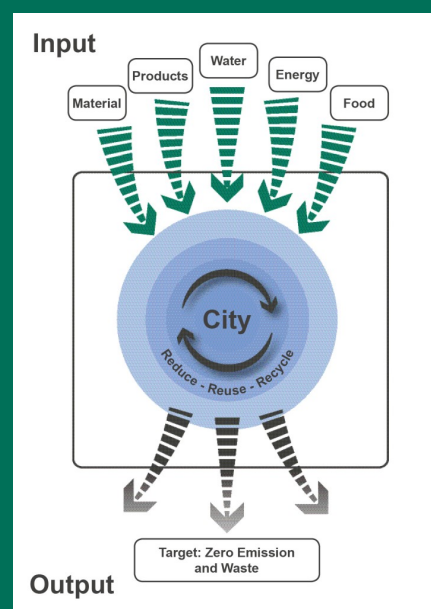
Dedicated to further knowledge to facilitate decision making and provide access to information for decision makers in various fields related to resource efficiency and SCP as well as to increase access, processing and use of resources through supply chain and life cycle management.

Enabling Framework

Offer national and city decision makers access to technical expertise in areas such as policy development and proven practical tools, market incentives and public-private partnership options to support resource efficiency.

Network Platform

To provide a mechanism for decision makers to exchange experiences, share best practices and establish a peer-review process across cities for further improving access to resources and their efficient use.



The Global Initiative will focus on the following:

- **Develop a resource footprint of cities** - informed by the above core activities, knowledge on resource flows and resources assessments (inputs/outputs) in cities is improved and common indicators are set up with the overall aim of contributing to the development of a resource footprint of a city. This will provide decision makers with a unique tool to support and follow progress on the efficient use of the resources available to them with adequate policy tools and market instruments.
- **Develop clear goals and targets** - such as reduction in energy consumed in buildings and of water use in urban areas, reduction of waste as well as transforming waste into resources. Assist cities in accessing the resources needed to achieve them. Use ambitious goals to develop and disseminate a set of criteria for a model resource efficient city.
- **Offer technical expertise** - Facilitate access to public and private sector expertise that cities need to overcome their unique challenges and at the same time further the rapid spread of good practices and new technologies in the energy generation, buildings, transport, water, food and waste sectors. Provide UNEP's advice and technical expertise or support for important dimensions of resource efficiency such as decoupling city development from resource use and its environmental impact, supply chain management, life cycle analysis and a systemic analysis of resource flows in cities.



Suggested Roadmap

2012 1. **Preparatory work and launch of GI-REC** at Rio+20 United Nations Conference on Sustainable Development

2012 – 2013 2. **City's Survey** - undertaking a survey of about 300 cities to help them understand, identify and manage their resource footprint and potential efficiency gains.

2013 3. **Operationalize the GI-REC** - using UNEP's convening ability to mobilize partners, connect cities and source funding.

>>GI-REC to attract 200 cities by 2015 & 400 by 2020
>>GI-REC to join forces with 50 partners from public and private sector by 2015 & 100 partners by 2020

2013 – 2014 4. **Develop a Research Agenda** - Inventory of UNEP's and partners' initiatives and expertise on resource efficiency. Developing relevant methodologies and establishing a set of criteria and targets for a model resource efficient city.

2013 – 2014 5. **Establish Network Platform** - for facilitating exchange of experiences and best practices through regular meetings, conferences and roundtables and the set up of a peer-review process across cities.

2015 > Leading to the development of a resource footprint of cities together with partner cities and partners towards more resource efficient cities.

How will the Global Initiative operate?

Based on its joint work with international actors such as UN-Habitat, ICLEI, the World Bank, Cities Alliance, OECD, UCLG and on existing partnerships such as the Urban Environmental Accords Member Alliance and Sustainable Buildings and Climate Initiative (SBCI), UNEP will use its track record on promoting SCP and resource efficiency, comprehensive scientific expertise and convening ability to bring together other stakeholders to ensure that cities can become increasingly resource efficient. UNEP will be partnering with and drawing on the technical, scientific expertise of national and local government agencies, the private sector and other UN organizations to support the Initiative as a major contribution to liveable and sustainable cities in particular as a driver for sustainability in general.

UNEP invites all interested **cities with population of 500,000 or greater**, as well as national and international actors who share resource efficiency objectives with related challenges and opportunities to join the Global Initiative, and to achieve among others the following indicative targets:

- By 2015, 20 partner cities to have access to financial mechanisms to support energy efficient and cost effective sustainable buildings.
- By 2017, 50 partner cities to apply Sustainable Building Standards and Global City Environmental Assessment Frameworks together with regular reporting on progress.
- By 2020, 100 partner cities to improve recycling rates of solid waste by 50%.
- By 2020 to improve energy and water efficiency in buildings, industries and cities by 50%.

The Initiative will provide partners with knowledge for informed decision making and will seek to establish synergies with the work undertaken by other partners. UNEP invites actors such as international institutions, multilateral aid agencies, international economic development and financial organizations, business and industry, research institutions, non-governmental organizations, national and local governments to join hands for driving action based on a realistic, but ambitious work plan under the auspices of the Global Initiative for Resource Efficient Cities.

Join now

If you want to implement the principles of Resource Efficiency in your city, join the **Global Initiative for Resource Efficient Cities** now.

Comments are welcome to inform the development of the **Global Initiative for Resource Efficient Cities!**



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