How can we protect the environment, reduce poverty and maintain economic growth?

By Decoupling: breaking the link between resource use and economic growth

Using less land, water, energy and materials to maintain economic growth is: Resource decoupling

Using resources wisely over their lifetime to reduce environmental impact is: Impact decoupling

Considerations for future policy

Each country is different: developed countries may require absolute decoupling (absolute resource use decline), while developing/emerging economies may require relative decoupling (rate of resource use is lower than economic growth rate).

- Use taxation or subsidy reduction to move resource prices upwards in line with documented increases in resource productivity.
- Remove technological and institutional barriers to innovation in resource productivity.
- Shift revenue-raising onto resource prices through taxation of resources or in relation to product imports, with recycling of revenues back to the economy.
- Remove all non-economic barriers to innovation in resource productivity.
- Influence corporate behaviour and public consumption patterns to reduce resource use.
- Create favourable conditions for investment in technology.

Putting decoupling into practice

Country experiences suggest that decoupling can lead to reduced waste and emissions, cost savings, job creation and poverty reduction.

CITIES’ ROLE IN DECOUPLING

Cities can play a role in decoupling. They are centres of innovation where transport, water, sanitation, waste, energy and housing can be provided more efficiently to improve the lives of growing populations. Currently:

- ...80% of global GDP is produced in cities.
- ...cities consume 60-80% of global energy.
- ...cities generate 95% of carbon emissions.
- ...cities consume more than 75% of the world’s natural resources.

But, city dwellers – at comparable income levels – need fewer resources than rural dwellers. Against century-long trends, higher density cities are more energy and resource efficient, when sustainable development policies are put in place.

CITY-LEVEL DECOUPLING requires policies for sustainable urban resource flows and governance of infrastructure transitions.

Public investments should support infrastructure that stimulate low-carbon, resource-efficient and equitable urban development.

CITIES should set specific targets to use resources more efficiently and formulate plans to achieve them.

Private sector needs to be engaged in translating innovations into city-wide projects.

Environmental sustainability needs to be effectively mainstreamed in urban development policy frameworks.

SOURCES & CONTACT

This document highlights findings from the reports on decoupling and should be read in conjunction with the full report. References to research on which this infographic is based are listed in the full report.


The International Resource Panel was established in 2007 to provide independent, science’s assessment on the sustainable use of natural resources and the impacts of resource use over the full life cycle.

www.unep.org/innovatepanel