United Nations Development Programme

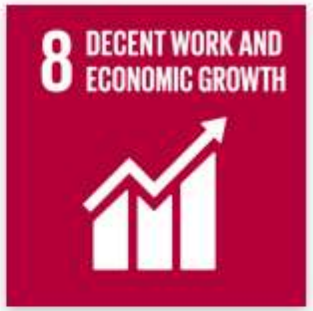
SUSTAINABLE DEVELOPMENT GOALS | OUR FOCUS | MORE | DONATE

OUR FOCUS

2030 Agenda for Sustainable Development

HOME / 2030 AGENDA FOR SUSTAINABLE DEVELOPMENT

SUSTAINABLE DEVELOPMENT GOALS



More than half of the world's population now live in urban areas. By 2050, that figure will have risen to 6.5 billion people – two-thirds of all humanity.

Sustainable development cannot be achieved without significantly transforming the way we build and manage our urban spaces.

http://www.undp.org

21 Features of the Future Sustainable City

Finance and auditing

- **Joined-up action.** Departments need to talk to each other so that, for a properly joined-up sustainability strategy, say, the Transport Department is not working against the interests of the planning department and so on.
- **CEO buy-in.** This means that the chief executive needs to be on board with sustainability agenda and have hardwired it into all the other departments, with the absolute essential inclusion of the finance department.
- **New economics.** Finance departments need to have the ability to successfully make the financial case for the investments required to deliver sustainability and regeneration by factoring in the financial aspects of ancillary benefits of measures to be taken, such as: job creation, reducing inequalities, reducing crime and congestion, and improving citizen health and well-being.
- **Modelling and auditing.** Life-cycle analysis, carbon accounting, or ecological-footprinting need to be applied consistently across the board so that different strategies can be properly compared and to maximise overall environmental, carbon and cost savings. Targets must be monitored and properly phased, with rewards.
- **Networking**. It's very important that influencers within city administrations are able to travel to other cities or network with them online to see what they have done and bring back the best innovatory practices so that they become embedded everywhere. That's partly what this website is for.
- **Training**. All the above implies a great need for constant program of in-service training to keep personnel up-to-date with the latest techniques, thinking and technologies

Transport

- **Promoting cycling and walkability.** There is more and more awareness of the need to plan for walkability and cyclability in cities. cycling and walking have numerous benefits in terms of reduced congestion, improved air quality, promoting health and reducing health costs.
- **Planning for local hubs.** As cities spread we need to think of hubs, and how local services can be provided at these hubs. This reduces the need to commute or travel in the first place. to keep it local and reduce congestion and carbon emissions.
- **Congestion charging.** This helps because it puts a price on diesel and petrol-fuelled personal travel. It actively encourages more sustainable travel modes.
- **Extensive provision of electric vehicle charging points.** This encourages their uptake, especially if electric scooters and other small vehicles are facilitated for what are, after all, the majority of journeys: short ones. Hire schemes for small electric vehicles, like those schemes mentioned for bikes above, allow people to use one for a journey, and leave it where they are going for someone else to use.
- **Seamless travel.** Properly joined-up public transport systems allow people easily to hop from bus to Metro/subway to train using the same payment method and without having to wait very long. Being able to take a bike on a train or even the Metro/subway is desirable

https://www.smartcitiesdive.com/ex/sustainablecities collective/21-features-future-sustainable-city/285946/

Smart cities

- **Tapping the wisdom of crowds**, i.e. the people who live there, to get them to tell you what they think will make their cities more liveable has great potential **smart, connected cities** technology is necessarily sustainable.

- **Collaborative partnerships.** Successful sustainable projects happen when those at the top, in government, and those at the grassroots work together instead of against each other.

Buildings

- **Remote monitoring and management.** Wireless building energy monitoring systems allow all existing buildings to be remotely monitorable and controlled to minimise energy use and identify hot spots for action. If energy usage is made public in real time to employees together with its degree of alignment with reduction targets, everybody is enabled to get on board the efficiency agenda.
- **Densification.** Dense cities are more sustainable because the impact per unit is less, up to a limit. Accommodation will become more affordable, in general, as a result. Land use should be mixed, with light industry interspersed with retail, office and workshop space and services to create local jobs and social diversity, part of the art of placemaking.
- **Climate resilience:** It should go without saying these days that planning requirements for the built environment include protection from weather extremes: overheating, flooding and storms.

Energy

- **Local energy**: community energy and district heating schemes, combined heat and power, heat pumps (whether ground or water source), should all be encouraged.
- **Solar energy:** The ability to use dye-sensitive PV coatings on building cladding to generate electricity is being pioneered in Swansea by Tata Steel for instance, and will become available and cost effective in just a few years. The advantage is that surfaces do not need to point at the sun to be efficient and the panels don't take up land space. Solar coling will become more widely available, together with Passivhaus construction.
- **Anaerobic digestion.** More power will come from anaerobic digestion of organic and green waste to produce natural gas that may be injected into the mains, used in local network combined heat and power plants or to power transport, with the digestate being used as a fertiliser.

Food

- **Urban growing.** On the individual level of city dwellers, after energy consumption, food consumption is the biggest source of carbon emissions, then transport, consumables and housing. Urban growing can include: rooftop and vertical gardens, allotments, teaching children to grow food in schools, community-supported agriculture, farmers markets, and, on the horizon, growing food intensively indoors, both traditional and novel (engineered) foodstuffs.
- **Making space for nature:** if space is to be made for the natural environment – to improve biodiversity and local air quality, reduce the 'heat island' effect, and improve well-being – why should the plants and trees not be edible: nuts, fruit, herbs, decorative brassicas, and so on? Let's see an end to the use of plants just for 'low-maintenance green cover' and have more useful plants managed by community groups.

TUGAS PRESENTASI – STUDI KASUS SUSTAINABLE CITY

- PRESENTASI PADA MINGGU KE 15
- SETIAP KELOMPOK MEMPRESENTASIKAN STUDI KASUS PADA KOTA DENGAN KONSEP SUSTAINABLE CITY