climatechampions
local learning communities

BECOMING A CLIMATE CHAMPION

SDG11 – Sustainable Cities & Communities

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WELCOME!

This module is part of the Climate Change Community Champions course, and is specially dedicated to **SDG11 – Sustainable Cities & Climate Action.**

The key topics of this module are:

- The importance of Biodiversity & Climate Action in SDG11: Sustainable Cities & Communities
- The mission of SDG11 is to make cities and human settlements inclusive, safe, resilient and sustainable

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01

A call to action for sustainable cities & communities

In this section, you will explore how to develop sustainable cities and communities in the context of UN Sustainable Development Goal 11 targets.

Everyone can help to make sure that we meet the ten targets of SDG 11 by 2030 to create action and make cities and communities sustainable.

Visit:
https://www.youtube.com/watch?v=Awu3JJC3A0k

A call to action for Climate Champions

Sustainable Development Goal 11 (SDG 11) - Make cities and human settlements inclusive, safe, resilient and sustainable

The world's population is constantly increasing. To accommodate everyone, we need to build modern, sustainable cities. For all of us to survive and prosper, we need new, intelligent urban planning that creates safe, affordable and resilient cities with green and culturally inspiring living conditions.

https://ellenmacarthurfoundation.org/topics/cities/overview
https://www.ecology-and-infrastructure.bg/bg/ecology-and-infrastructure/4/127/

A call to action for Climate Champions

The 2030 Agenda for SDG 11

11.1 By 2030, ensure access for all *to adequate, safe and affordable housing and basic services and upgrade slums*

11.2 By 2030, provide access to *safe, affordable, accessible and sustainable transport systems for all*, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons

11.3 By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, *integrated and sustainable human settlement planning and management in all countries*

11.4 Strengthen efforts *to protect and safeguard the world's cultural and natural heritage*

11.5 By 2030, *significantly reduce the number of deaths* and the number of people affected and substantially decrease the direct economic losses relative to global GDP caused by *disasters, including water-related disasters,* with a focus on protecting the poor and people in vulnerable situations

A call to action for Climate Champions

The 2030 Agenda for SDG 11

11.6 By 2030, reduce the *adverse per capita environmental impact of cities,* paying special attention to *air quality and municipal and other waste management*

11.7 By 2030, provide *universal access to safe, inclusive and accessible, green and public spaces,* in particular for women and children, older persons and persons with disabilities

11.a Support positive *economic, social and environmental links between urban, peri-urban and rural areas* by strengthening *national and regional development planning*

11.b By 2030, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards *inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters,* and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, *holistic disaster risk management at all levels*

11.c Support *under developed countries*, including through *financial and technical assistance, in building sustainable and resilient buildings* utilizing local materials

A call to action for Climate Champions

The future of the settlements and cities facts and figures

- Today, over 50% of the world population already live in cities & urban areas; expected to be more than 70% by 2050, with almost all the growth occurring in the developing world.

- 700 million people live in slums today and the number keeps rising.

A call to action for Climate Champions

The future of the settlements and cities facts and figures

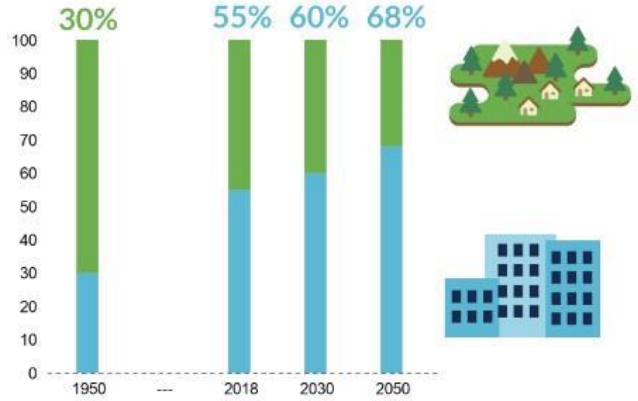
➢ Rapid urbanization is exerting pressure on fresh water supplies, sewage, the living environment, and public health. Health damages associated with exposure to air pollution is $8.1 trillion, equivalent to 6.1 percent of global GDP according to World Bank statement.

➢ Growing vulnerability of coastal cities due to climate related disasters, such as floods, storms and sea level rising is predicted to increase to US$52 billion per year by 2050.

Face the facts of the future

Our future is urban!

From only 751 million in 1950, the population of the world's cities has rocketed to 4.2 billion.



World Urbanization Prospects: The 2018 Revision

Access the report: bit.ly/wup2018 • #UNPopulation

UN DESA

Cities: the starting point

Face the facts of the future

Cities account for 85% of global GDP generation. Cities are also aggregators of materials and nutrients, accounting for 75% of natural resources and 67% of produced food consumption, 50% of global waste production, and 60-80% of GHG emissions.

Source: Ellen MacArthur Foundation (2017), Cities in the Circular Economy: An Initial Exploration


The future of the settlements calls for urban green and circular economy.

02

SDG 11 Key elements, challenges and opportunities

In this section we look at the causes for increased CO2 emissions in the cities and the importance of applying circular economy models to reduce them.

What are the key challenges of sustainable cities and communities?

To turn the linear model of development into a circular!

What are the key elements of the circularity?

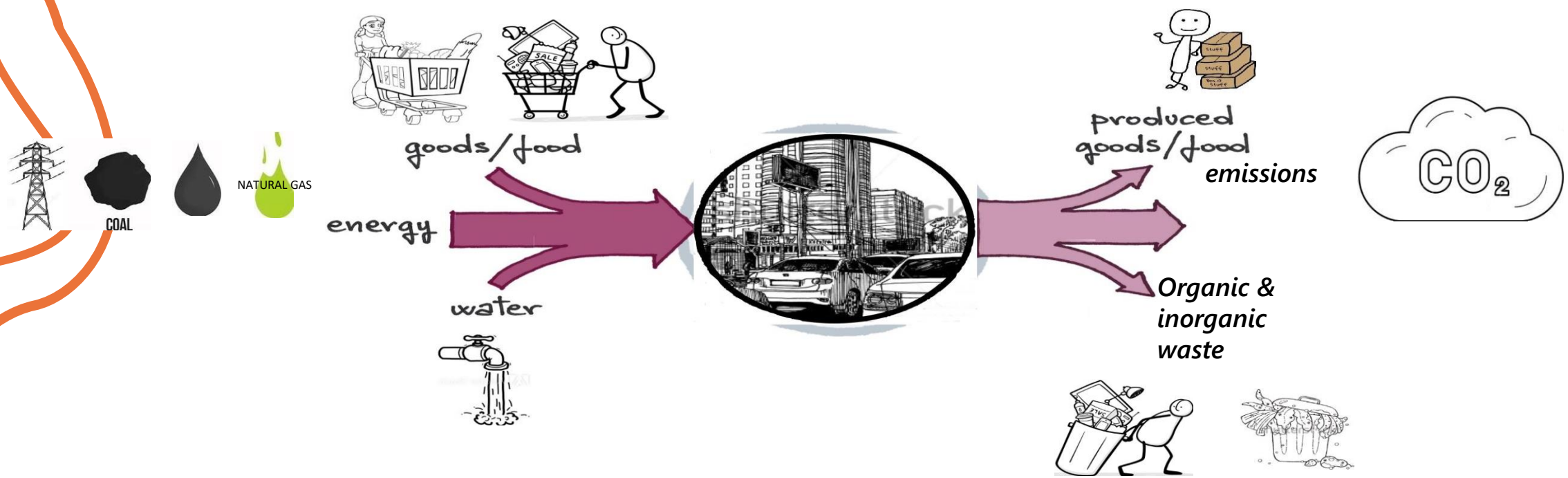
Renewability
Resource efficiency
Product life extension
Product as a service
Sharing platforms
ZERO WASTE

SDG11 key elements, challenges and opportunities

Main challenge: Urban metabolism with consumption based emissions

Urban metabolism is a model that provides a unified or holistic viewpoint to encompass all of the activities of a city in a single model. By viewing the city as an organism that consumes resources and produces waste we can find ways to improve resource use and reduce the environmental impact.

Cities are still are using linear metabolism where the resources entering the city leave it again as solid, liquid and airborne waste.



SDG11 key elements, challenges and opportunities

The key to a sustainable resilient city is to harness the waste as resources.
This results in resource flow loops and a circular metabolism.

Circular urban metabolism is a concept that refers to cities functioning as living organisms that consume, metabolize and excrete, breathe, distribute and protect themselves. For a settlement to be sustainable, it should:

➢ minimise the input flow of materials and embodied emissions
➢ minimise the use of energy and use only renewable, to reduce GHG emissions

SDG11 key elements, challenges and opportunities

The circular metabolism can be achieved by applying circular economy business models. Circularity offers opportunities and solutions, growth spurs, reduces costs, and builds resilience.

Circularity means:

- ✓Improved product **durability, reusability, upgradability and reparability,** addressing the presence of **hazardous chemicals** in products, and increasing their **energy and resource efficiency;**
- ✓Increased **recycled content in products,** while ensuring their performance and safety;
- ✓Enabled **remanufacturing and high-quality recycling;**
- ✓Reduced **carbon and environmental footprints;**
- ✓Restricted **single-use** and countering **premature obsolescence;**

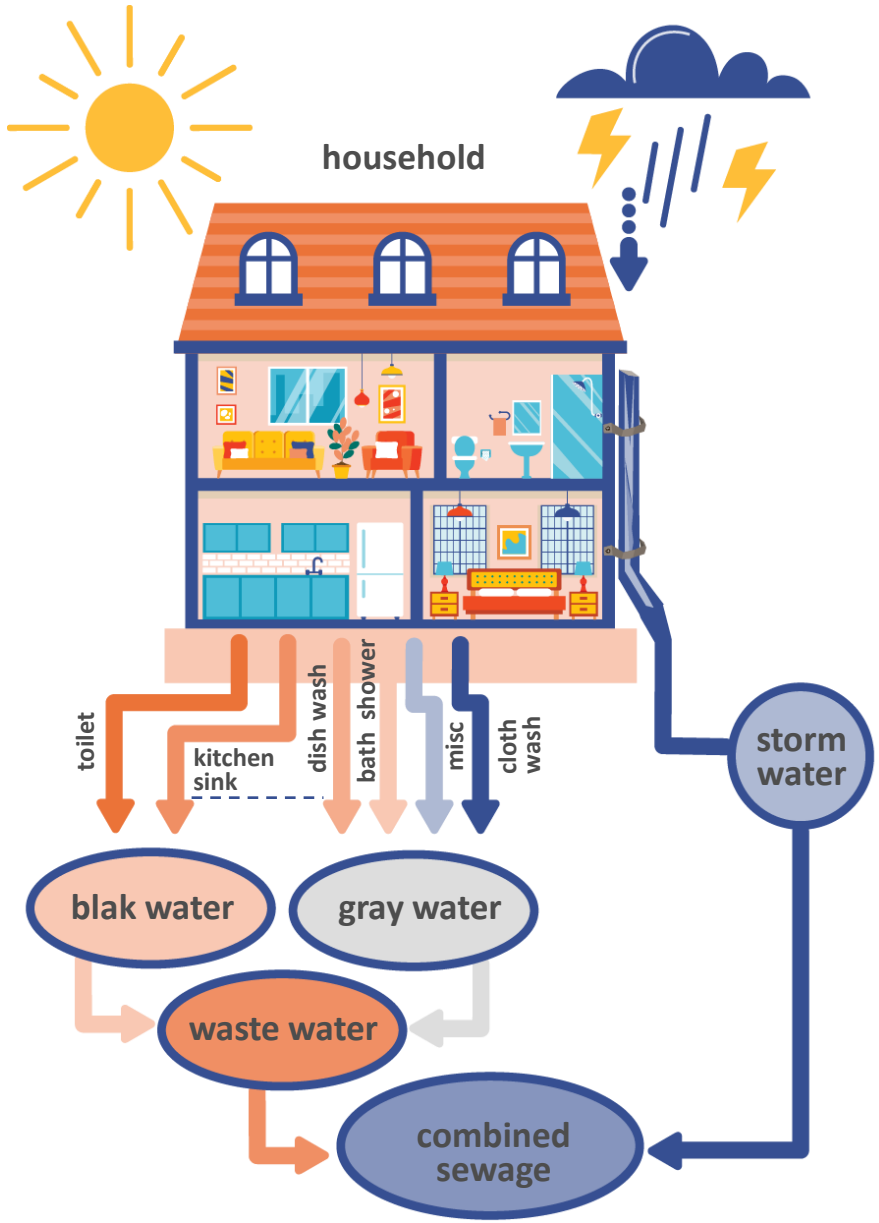
The circular economy holds a particular promise for achieving multiple SDGs, including SDGs 6 on energy, 8 on economic growth, 11 on sustainable cities, 12 on sustainable consumption and production, 13 on climate change, 14 on oceans, and 15 on life on land.

SDG11 key elements, challenges and opportunities

Key elements to become circular and sustainable settlement:
Use of renewable energy sources (RES)
Introduction of energy efficiency measures
Avoid the glass buildings and malls

This is a necessary but not sufficient condition for a settlement to be sustainable

SDG11 key elements, challenges and opportunities

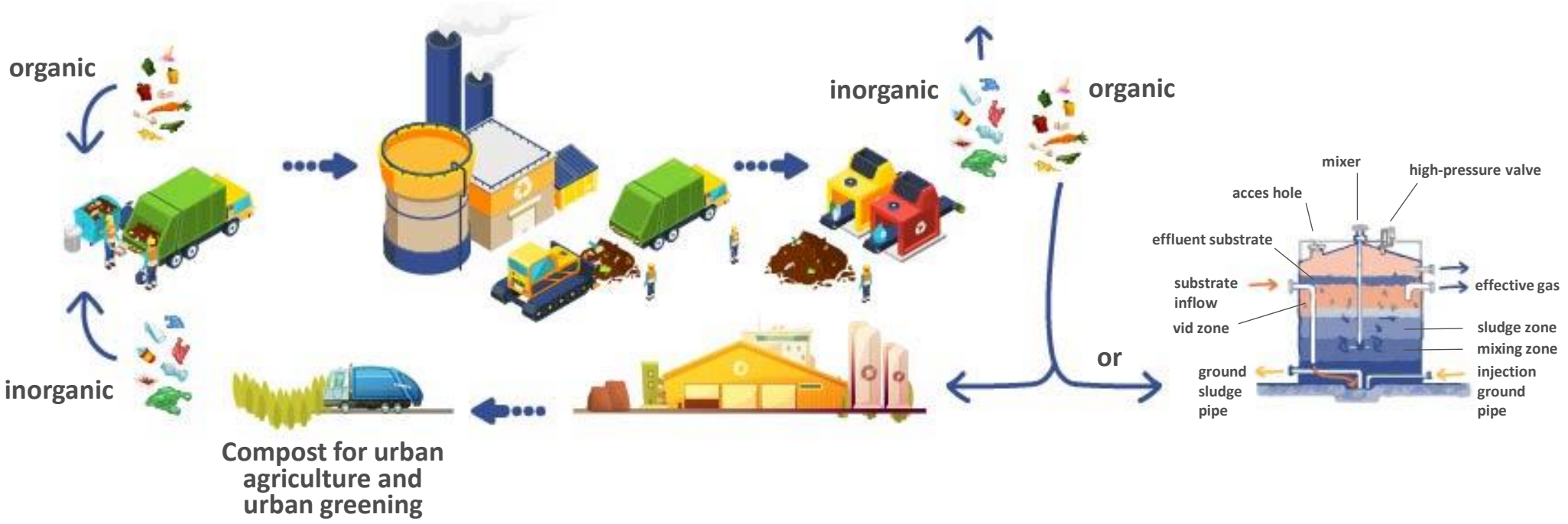


Key elements to become a circular and sustainable settlement:
Introduce building and urban regulations enhancing wastewater treatment and reuse

SDG11 key elements, challenges and opportunities

Key elements to become a circular and sustainable settlement:
Apply smart waste management systems

Transform food wastes into energy and/or fertilisers



SDG11 key elements, challenges and opportunities

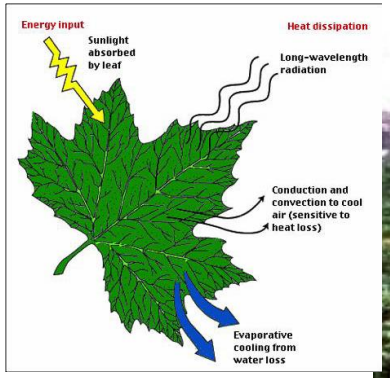
Key elements to become a circular and sustainable settlement:
Minimise CO2 emissions and air pollution in the cities from transport - mixed use of transport

SDG11 key elements, challenges and opportunities

Key elements to become a circular and sustainable settlement:
Ban private vehicles for city centers;
Promote public transport;
Incentivise bike and walk paths and electric car sharing

SDG11 key elements, challenges and opportunities

Key elements to become a circular and sustainable settlement:
Become green city



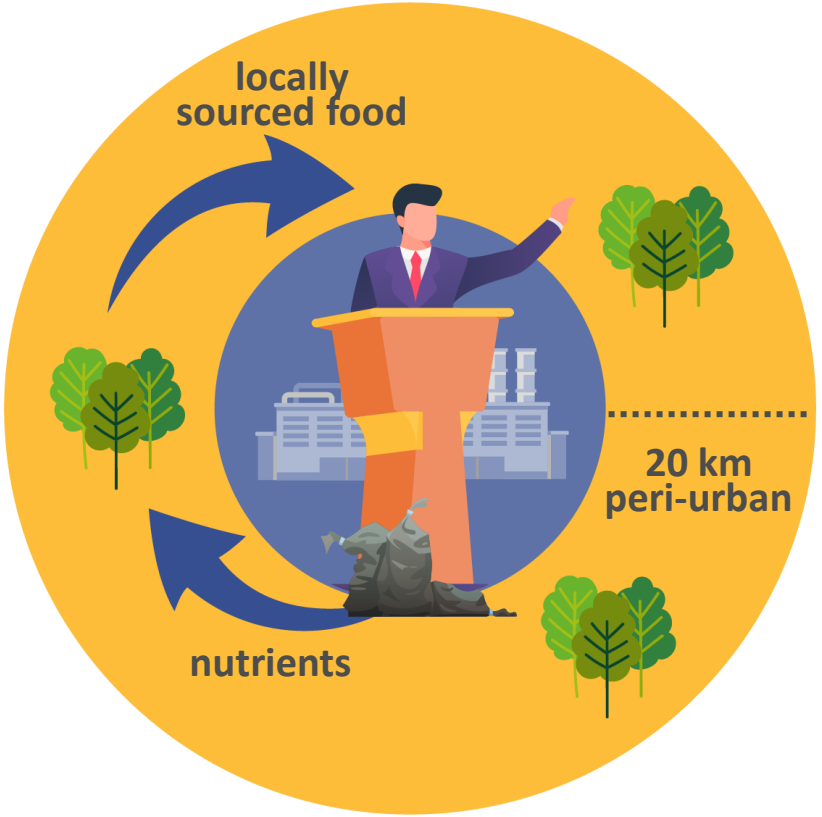
The green issue

Greening and urban agriculture reduce the footprint trough lower transport needs for food supply.

SDG11 key elements, challenges and opportunities

Key elements to become a circular and sustainable settlement:
Closing nutrients' cycle
Reduce agriculture's impact on environment

diversified agro-ecological farming systems



SDG11 key elements, challenges and opportunities

Key elements to become a circular and sustainable settlement:
Incentivise deposit return scheme and packaging free retail

SDG11 key elements, challenges and opportunities

Establish and appropriately distribute repair, upgrade, refurbish and reuse centers in the settlement.

SDG11 key elements, challenges and opportunities

Key elements to become a circular and sustainable settlement:
Favor small, distributed retail shops and food street in the city

03

Things we can do as individuals, as communities

The case studies included in Section 3 demonstrate how the circularity in our daily life and business activities will help us to create more sustainable cities and communities.

We have found inspiring examples for:

- Resource efficiency, re-use, recycle
- Renewability
- Product life extension
- Product as a service
- Sharing platforms
- Zero Waste

WHAT IS RESOURCE EFFICIENCY REPAIR, RE-USE and ZERO WASTE?

"ZERO WASTE is conservation of all resources by means of responsible production, consumption, reuse, and recovery of products, packaging, and materials without burning and with no discharges to land, water, or air that threaten the environment or human health."

Resource efficiency, repair and re-use

Producing goods using recycled materials is much less energy intensive than manufacturing goods from virgin materials.

Recycling has a great potential to improve resource efficiency by reducing production costs and carbon emissions.

Reduce reuse and recycle are the 3Rs for sustainable waste management i.e. sustainable settlements

BENEFITS

Resource efficiency, recycling and reuse means using renewable and recyclable materials as well as renewable energy in product design and manufacturing.

See examples of what communities do on the following slides.

Resource Efficiency Repair and Re-use

SUEZ - RECYCLING, RECOVERY AND WASTE MANAGEMENT, MANCHESTER, UK

Sustainability is the only business case for SUEZ as well as for the Earth, the economy and everyone. The SUEZ Group has long recognized this. They support the transition to a circular economy through innovation in waste and waste water management.

The aims:

- ✓Reduced carbon footprint
- ✓Protected and safeguarded ecosystems
- ✓Conserved and restored natural capital
- ✓Optimised resource use
- ✓Renewed energy
- ✓Shared knowledge and supported communities

Resource Efficiency Repair and Re-use

RENEW Hub

Established in cooperation between SUEZ and Greater Manchester Combined Authority using an old building for biowaste treatment.

SUEZ

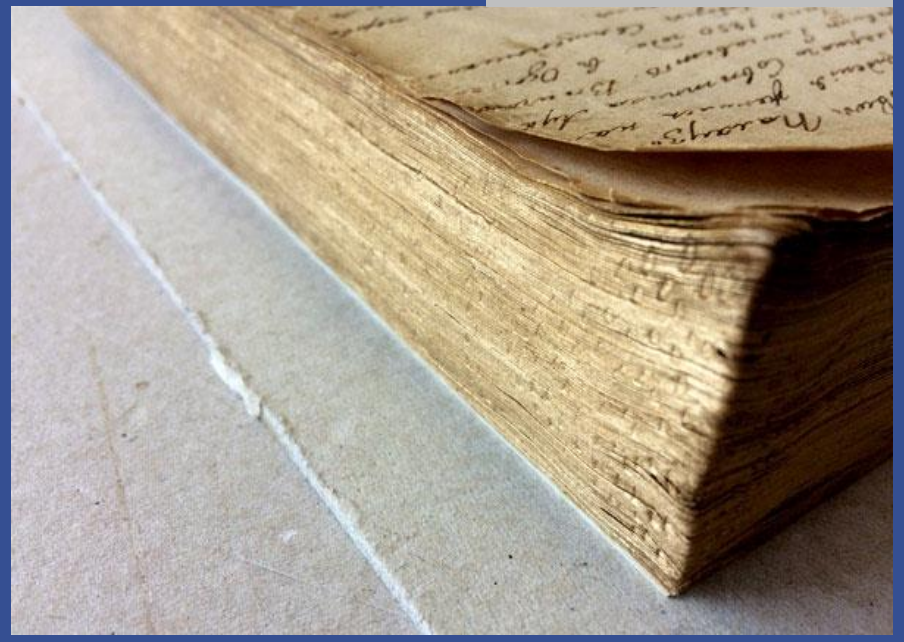
SUEZ brings on an industrial scale to Greater Manchester a society which wastes less, reuses more, and gives items a second lease of life leading to less manufacturing of new products and a more circular economy?

Collects end-of-life bicycles, furniture, electrical equipment, toys and many more and gives them new life through repair and refurbish.

Follow the renew hub initiatives on:
https://carboncopy.eco/initiatives/renew-hub

Things we can do as individuals, as communities – RE-USE

Book Saviors



https://ecovarna.info/

Book extraction, recovery and storage activities contribute to the protection of the environment by reducing the amount of waste paper streams, as well as saving material resources and energy. The intellectual product from the use of these books significantly exceeds their value, as waste paper.

The envisaged activities apply the highest priorities of the waste management hierarchy – prevention and preparation for re-use

In parallel to extraction from the waste stream the books are restored, repaired and reproduced and made available for public access.

RE-USE TO PREVENT WASTE AND PROTECT NATURE

CashON – BRING BACK A BOX – SAVE A TREE

In recent years, online deliveries have a dramatic increase, as well as the paper used for packaging, such as c boxes, envelopes and more.

The message that the organizers of the CashON campaign send is that every box is a tree saved from cutting. Let us look at it not as waste, but as a resource that can benefit both the economy and the environment. One box can be used up to 7 times, and after depreciation can be recycled and used as a paper.

RE-USE TO PREVENT WASTE AND PROTECT NATURE

CashON – BRING BACK A BOX – SAVE A TREE, - Public Environmental Center for Sustainable Development (PECSD), Varna, Bulgaria

A joint long-term initiative for forest protection has been launched recently in the city of Varna by PECSD, Varna and MiaZoo. The campaign, called CashON, aims to reduce the use of new boxes for e-commerce saving at least 60 trees a year from cutting.

For each box that MiaZoo customers return instead of throwing it away, the company is committed to reuse it and donate 15 eurocents for afforestation causes.

The funds raised will be donated to the Fund "LIST" (LEAF) at the Public Center for Environment and Sustainable Development in Varna (PECSD) for the implementation of civic projects related to forest protection.

CEMIS: CIRCULAR ECONOMY MANAGEMENT INFORMATION SYSTEM, BULGARIA

Well designed and user friendly information systems effectively engages communities in waste prevention, separation and reduction.

CEMIS is an information platform, providing users with a systematic and informed choice about the possibilities for prevention and reduction of the generated household waste, separate collection, preparation for reuse and recycling of household waste materials.

CEMIS – combines spatial and non-spatial data from different sources and provides easy access through the resources of the global network.

CEMIS – provides a combined presentation of user-oriented information and data for different target groups, administration, non-governmental sector, business and the public.
https://www.cemis.bg/bg/

ZERO WASTE

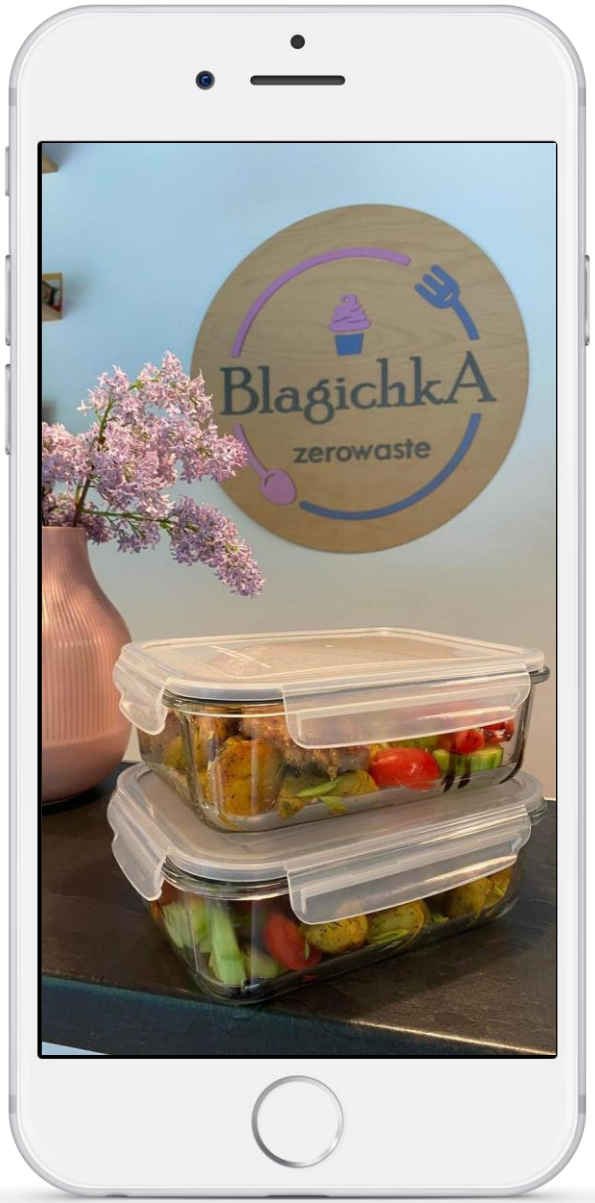
BLAGICHKA - ZERO WASTE, BULGARIA

https://blagichka.com/

"Blagichka– ZERO WASTE" is the first of it's kind ZERO WASTE restaurant in Bulgaria which offers:

- ✓Natural healthy food from local producers;
- ✓ Zero Waste production and distribution (offers refill options to avoid packaging waste, use recipes for minimum food waste;
- ✓Constant upgrade of knowledge and training of personnel
- ✓Value the clients

"In Blagichka we believe that eating is a ritual which brings happiness and energy and giving chance to the young people with disabilities is our mission. It is worth it every single effort not to generate waste "
Blazhka Dimitrova, owner Blagichka Ltd.



FOOD WASTE PREVENTION

COZZO APP, BULGARIA

https://cozzo.app/

CozZo App is a “food manager” application

More than 15 000 downloads in different countries – Bulgaria, USA, IK, the Netherlands, Ireland

It manages the process of planning and purchasing of food products and food preparation at home

Reduces food loss by informing you what is available in the fridge and when is the expiry date of certain product .

SHORT SUPPLY CHAINS FOR FOOD WASTE PREVENTION

Foodhub – DIGITAL Distribution CENTER for local food

The platform is developed in close cooperation with local producers. It provides market access of small local producers connecting them with consumers and restaurants .

The platform works with around 20 producers per week and has around 1500 clients. The access requirements are to be local small food producers. The pricing model applied by the platform allows the producers to determine their price in a transparent way. The platform user fee is also seen by the consumers. The fee includes costs for product collection, data traffic, packaging, and others.

Compared to food stores there is no food waste generated by the platform.

CEMIS: CIRCULAR ECONOMY MANAGEMENT INFORMATION SYSTEM

The main goal of CEMIS is to help consumers understand the benefits of the circular economy and the possibilities for delivery, donation, search, repair or rental of appliances, furniture, things and products.

The CEMIS platform achieves increased awareness by creating a public shared space where each user can provide information about the places for delivering of waste, services available in the neighborhoods, campaigns, initiatives, good practices and even ideas for creating and developing models for a circular economy.

Things we can do as individuals, as communities – RE-USE

Book Saviors - Public Environmental Center for Sustainable Development (PECSD), Varna, Bulgaria

The challenge

In the course of the long-term recycling initiative "Leaf by Leaf" of PECSD books that have great intellectual value can be discovered and extracted from the waste streams. In most cases, these books are in poor condition, but can be reused and need to be restored and repaired. Another group of books – of high antique and artistic value, are stored through their xerographic or photographic reproduction, as well as through digitisation.

For the implementation of the activities PECSD received support of 100 thousand Euro from the EU program "For the Land", from their own funds, technical expertise, volunteers and from the funds of the organisation.

WHAT IS RENEWABILITY?

RENEWABILITY

Renewable, recyclable and biodegradable materials, as well as the principles of eco-design, are preferred for products and their design. Fossil fuels are replaced by renewable energy.

BENEFITS

Basing a business model on renewability stimulates companies to look for different resources and suppliers for both material production and energy. Replacement of fossil fuels with renewable energy sources are the key for making the settlements sustainable.

See examples of what communities do on the following slides.

RENEWABLE ENERGY CHARGING STATIONS FOR ELECTRICAL VEHICLES

ALTERNA COOP VALENCIA, SPAIN

ALTERNA Coop Valencia is a cooperative for sustainable mobility. Its goal is to facilitate and encourage its members and society in general to use the least possible amount of energy for mobility (by walking, biking, and through shared electric vehicles). Thus, their main activity is car sharing among its members, using electric vehicles that are charged with electricity coming from **renewable energy sources.**

The Coop is based in the Valencian municipality of Albalat dels Sorells, and it now has 327 members distributed among 6 main local groups in the Valencia Region.

https://www.alterna.coop/

RENEWABILITY

Bluebloqs is a modular system for rainwater treatment, storage, and reuse. It combines biofiltration with aquifer storage technologies to achieve high treatment and recovery efficiencies. As a compact integrated system, Bluebloqs utilizes natural processes in a controlled manner, avoiding the need for large infrastructures.

RENEWABILITY AND ENERGY COMMUNITIES

SOM ENERGIA AND THE ENERGY COMMUNITIES

✓ Som Energia (we are energy, in English) was started in 2011 to challenge the current energy model and create a real alternative, a Spanish based energy cooperative.

✓ In this model, home owners are members of the non-profit cooperative that provides affordable and 100% clean energy electricity.

✓ Som Energia took as example similar and successful cooperative models from the UK, the Netherlands, Belgium and Denmark.

✓ In 2021 Som Energia has about 74.000 associates

Oldham Community Power http://oldhamcommunitypower.org.uk/

Oldham is one of the poorest areas of Greater Manchester. The council is a ‘co-operative council’ and wanted the benefits of renewable energy to be shared with the residents. The council conducted feasibility studies on schools and a community centre for PV installation. Five schools and the community centre appeared to be feasible for community - owned energy project.

Oldham Community Power took over the project management. They raised money, and borrowed a low interest loan from the council to install the PV panels. Once the local people could see the PV panels on the roofs, they bought shares in the organisation, and half of the cost of the scheme was paid for by local people who receive an annual interest payment on their shares.

WHAT MEANS PRODUCT AS A SERVICE?

Product as a service is a business model where the customer pays for certain functions or performance and avoids the risks of ownership. The total costs of ownership remain with the service provider, with revenue being earned by means of, for example, a leasing or rental agreement.

BENEFITS

Paying for the service means that the customer does not need to take care of the maintenance of the product and to think what to do with the product at the end of its life. The service provider earns revenue as long as the customers uses the service.

See examples of what communities do on the following slides.

Product as a Service to reduce pollution from fashion industry

CLOTHING AS A SERVICE MODEL, VAATEPUU FINLAND

Vaatepuu a finish company encourages women to invest in quality and lending, rather than quantity and buying the clothes. **Vaatepuu** clothing rental wants to create lower threshold for trying out a finished design. By growing the utilization rate of clothes and keeping them in use as long as possible, **Vaatepuu** offers sustainable alternative to fast fashion.

Clothing circulates within a network of stores, which helps maintain the growing customer interest in clothing rental. Clothing rental members can apply for clothes and accessories for a loan for a couple of weeks, after which they can exchange them for new products.

The most essential stakeholders are Finnish clothing brands and the franchising store owners.

https://vaatepuu.fi/

WHAT IS A SHARING PLATFORMS?

Sharing platforms maximize the usage of goods and resources and extend their life cycles by using digital platforms for renting, selling, sharing and reuse.

BENEFITS

The business is typically based on, for example, additional services and advertising revenue. Users and consumers benefit through low prices and a diverse and flexible selection

SHARING PLATFORMS

BUSINESS CASE ELECTRIC VEHICLE (EV) CAR SHARING PLATFORM

Cars are not in use for 95% of the time. At the same time, EVs can be expensive. Zoom EV helps owners recoup some of the cost when the car is not used by renting them to other people.

Zoom EV works with Local Authorities (LAs) which have fleets of cars and vans, mostly unused at weekends. Zoom EV is partnering with some geographic areas to enable staff to rent their fleet at weekends. This helps the LAs to achieve clean air targets whilst benefiting their staff and communities.

It also works with the private sector. Currently, it is working with a private delivery service to increase the number of its deliveries in electric vehicles.

https://www.zoom-ev.com/

SHARING PLATFORMS

REDUCE CO2 EMISSIONS AND AIR POLLUTION FROM TRANSPORT IN THE CITIES

CITY MOBILITY WITH SPARK, BULGARIA

The intensive traffic is among the major emission sources and contribute 40% to the air pollution in Sofia Municipality. The fleet electrification offers a potential for emission abatement, especially related to NOx and CO. A significant introduction of electric vehicles (26-40%) involving all vehicle categories is required to improve urban air quality.

SPARK offers a new generation service that allows the consumers to find and rent an electric vehicle no matter if it is for 15 minutes or a few days. After using the service, the car is left in one of the designated Spark areas in Sofia, including in the central part of the city, which is free for electric cars. Mobile application provides access to the electric vehicles.

Main stakeholders involved are Municipality of Sofia, Civil society, Businesses.

SHARING PLATFORMS

CITY MOBILITY WITH SPARK

SPARK is the first car-renting and sharing company fully equipped with electric vehicles, offering affordable environmental solutions for getting around Sofia.

The use of SPARK is charged per minute, which allows the customer to manage both their trip and expenses. SPARK also includes a wide network of charging stations in Sofia. At present, the company has about 500 cars. The number of customers is growing exponentially and in the first half of 2020 they had over 20,000 customers.

https://spark.bg/

SHARING PLATFORMS

NULA BIKES – MOBILE APPLICATION FOR SHARING BIKES IN SOFIA, BULGARIA

The bicycle rental system, or the so-called "Shared bikes", works through the application - Nula Bike. Rented bicycles cannot be dropped anywhere, but only at the stations indicated in the application. The locations for “bikes parking” are part of the municipal infrastructure. Nula Bike has signed memorandum with Green Sofia, part of Sofia Municipality. The municipality plans to set up more "green spaces" next to public transport stops. Each bike has a GPS, as well as padlocks for locking.

Nula Bike bicycles are renewed old bikes and fulfill all the technical and safety requirements for use. The motivation behind the company initiative is their philosophy of zero emissions through reduction of new bikes production but give a second chance of existing ones. A Nula Bike bicycle can be rented through the company's app and payment is by card.

In section 3 you followed different examples on how to make your city, neighborhood, settlement more sustainable, resilient and inclusive.

Now can you think of similar initiatives, activities, examples in you community?

- ❑ Do you have projects for renewable energy?
- ❑ How do you prevent waste generation?
- ❑ Are the local authorities in you area willing to Introduce building and urban regulations enhancing wastewater treatment and reuse?

Answering the questions and many more will help you to make your path to cleaner air, less waste, resilient and inclusive settlement more clear and thus reaching the goals of SDG11.

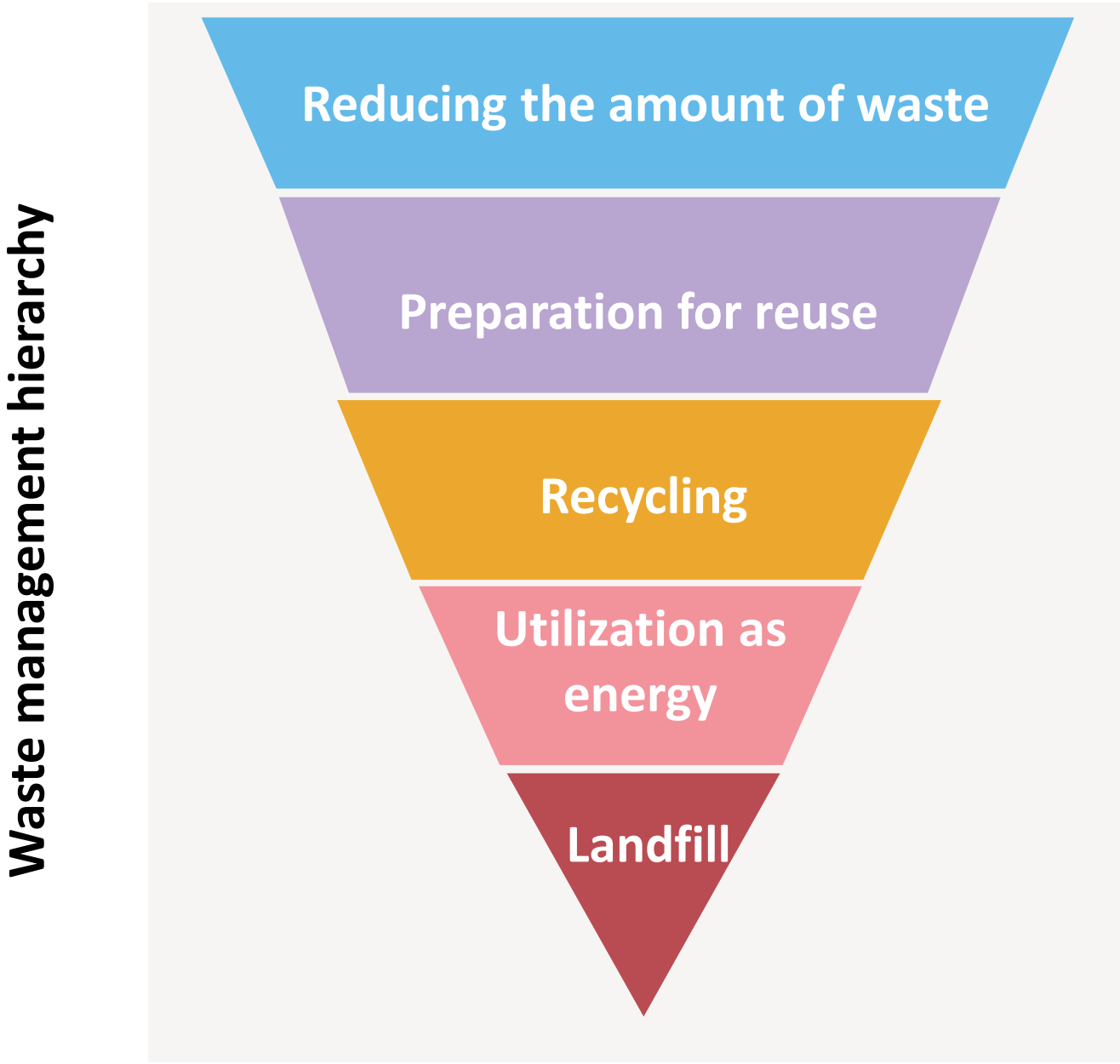
04

Policy tools for urban sustainable development

In our final section, we provide you with useful tools and templates to develop the road map for sustainable urban development.

The aim of the roadmap is to support the transition from a linear economic model to a circular economy, where resources are used more efficiently and virgin natural resources are needed less.

The waste management hierarchy is important to bring to a minimum the waste on the landfill and to reduce the CO2 emissions.



Start with identification of the sustainability challenges and define the key governance conditions and phases

Phase 1 - Planning smart sustainable city initiatives

1. Awareness on current state
2. Strategic planning
3. Defining assessment criteria

Phase 2 - Implementing smart sustainable city initiatives

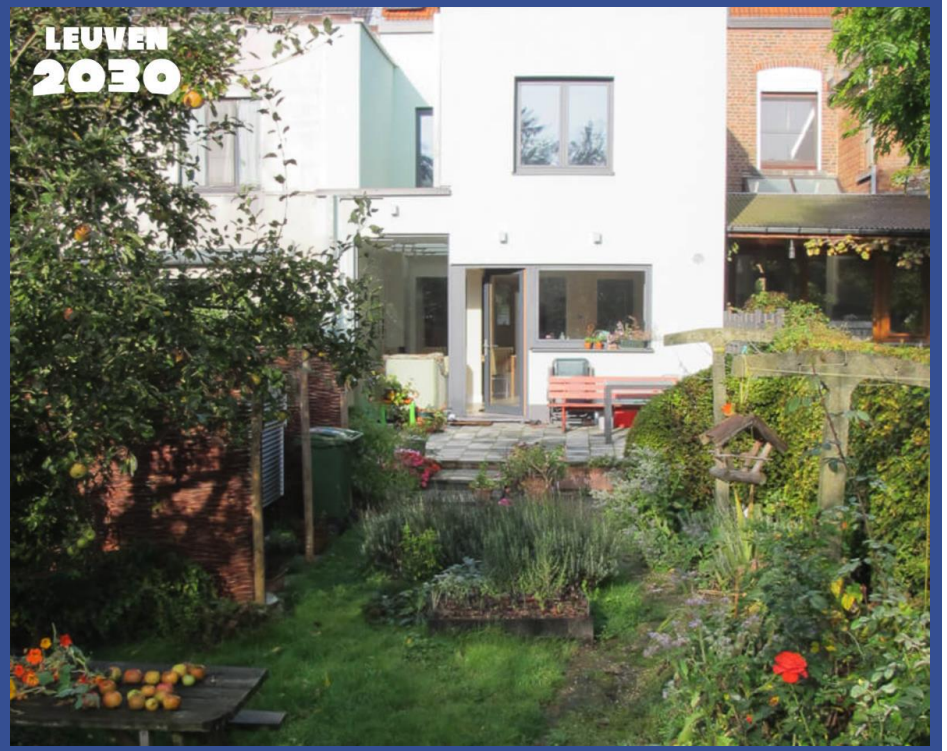
4. Managing policies
5. Defining management and governance arrangements
6. Engaging with stakeholders
7. Managing and governing data
8. Setting up the infrastructure and integration

Phase 3 - Adopting, monitoring and evaluating smart sustainable city initiatives

9. Delivering and disseminating initiatives
10. Managing education and users training
11. Monitoring and assessing initiatives for continuous improvement

Green City tool

Leuven 2030 City Roadmap



- Leuven 2030, alongside a large group of experts from various disciplines, has drawn up a Roadmap that contains a timeline with the steps to be taken between now and 2025, 2035 and 2050 to reach carbon neutrality.
- The Roadmap assigns a crucial role to every inhabitant, every company, every knowledge institution and every government. Their commitment, both individually and in collaboration, is crucial to evolve towards a healthy, livable and climate-neutral Leuven by 2050.
- To implement the Roadmap, Leuven 2030 turned to its network: for each of the Roadmap's programs, it appointed one or two Program Facilitators. These Program Facilitators, 18 in all, are a diverse set of people, including city and university staff, as well as people from the private sector.

Green City tool

Leuven 2030 City Roadmap

EIGHT AMBITIONS

The Roadmap is structured around eight ambitions for a climate-neutral Leuven. The first four ambitions together account for the four largest segments of Leuven's emissions output:

1. ***Climate-neutral living***
2. ***Climate-neutral urban services***
3. ***Climate-neutral mobility***
4. ***Consuming sustainably***
5. ***Producing renewable energy locally***
6. ***Increasing urban resilience***
7. ***Achieving climate neutrality together***
8. ***Sharing knowledge and innovating***

Green City tool

Leuven 2030 City Roadmap

These ambitions of Leuven Green City road map are broken down into 80 project clusters (so- called ‘sites’), organised into 13 programs.

Every one of these programs is key to achieving climate neutrality and should be considered a priority.

For every site, the Roadmap defines quantitative targets, to the extent possible, and proposes measures to meet them.

Every site will require a site leader, cooperation between multiple key actors, and the development and implementation of an action plan.

Green City tool

Leuven 2030 City Roadmap

THE ROADMAP`S 13 PROGRAMS

1. Retrofitting residential buildings
2. Retrofitting non-residential buildings
3. Climate-neutral new buildings
4. Vibrant centers and smart location policy
5. Sustainable modal shift
6. Greening the vehicle fleet
7. Generating green energy
8. Sustainable and healthy eating
9. Circular city
10. Green and resilient spaces
11. Governance and financing
12. Involving everybody in the transition
13. Learning and monitoring

Develop your road map to make your place sustainable, resilient and inclusive.

Visit:

https://www.youtube.com/watch?v=MnugJO6GDQs

Clearly describe the steps when you start to develop your road map to carbon neutrality

What are your targets to become carbon neutral in the next decades?

What is time span to reach the targets – 10, 20, 30 years?

Who will be involved on the road to carbon neutrality? Who and how to take them on board?

What investments are needed and how to secure the money?

Who is managing the process and how to monitor it.


“SUSTAINABLE DEVELOPMENT IS THAT WHICH MEETS THE NEEDS OF THE PRESENT WITHOUT COMPROMISING THE ABILITY OF FUTURE GENERATIONS TO MEET THEIR OWN NEEDS”
Gro Harlem Brundtland, Prime Minister of Norway (1981- 1996)

05

Summary & Review ☺

What have we learned?

In this Module, we explored the targets of UN Sustainable Development Goal 11 (SDG 11).

So what did we learn?

- We broke down the concept of the sustainable settlements and looked at the importance of biodiversity to reduce the climate change.
- We know now that the extensive use and depletion of natural resources is a strong driving force for finding means to reduce energy and material consumption, using existing resources in the most sustainable way and applying business models in accordance with the principles of the circular economy.
- The case studies demonstrated how the circularity in our daily life and business activities will help us to create more sustainable cities and communities.
- Development of road maps is a meaningful tool to develop the road map for sustainable urban development.

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THANK YOU

Any questions?

www.climatechampions.how