



SDG 11: Sustainable Cities and Communities

University of Applied Sciences Burgenland

11 SUSTAINABLE CITIES AND COMMUNITIES



**Interpretation
of sustainable cities
and communities**



Photo by [Felix Fuchs](#) on [Unsplash](#)

Main goal: to make cities and human settlements inclusive, safe, resilient and sustainable

Where do you live? In the country or in the city? Worldwide more than half of the people live in cities, and many are far larger than our cities in Europe. Mexico City has over 22 million inhabitants, while Berlin only has around 3.5 million. Immigration to cities is increasing, and by 2050 more than 70% of people are expected to live in cities. In order to avoid crime and tension in the metropolitan areas, it is important to plan well. By 2030, the UN demands to build housing and cities to support inclusivity and sustainable futures, renovate slums, create more green and public spaces for everyone, make housing affordable for everyone and improve the (public) transport system, especially the poorer countries should be supported in the design and construction of green, smart cities.



What makes a city sustainable?



Photo by Tommy Krombacher on Unsplash

Smart cities:

...are committed to systemic sustainability, transform energy systems and devise mobility options to counteract climate change, offering optimal quality of life to their citizens with minimum use of resources; additionally, engaging their inhabitants in co-developing new business models in support of the transition to energy-efficiency and a circular economy.

Source: smartcities.at



Did you know that by 2050 more than 70% of the world population will live in urban settlements?

Source: un.org



11 SUSTAINABLE CITIES AND COMMUNITIES



"I have always liked living in a city, but it can get very crowded, hot and dirty if the development isn't carefully planned and managed. Green spaces, good air quality, and public transport are key elements of any healthy urban area."



What makes a city sustainable?



Photo by Tommy Krombacher on Unsplash

Urban resilience:

...is the ability of urban systems to maintain stability during stress and the flexibility to adapt to changing conditions.

Source: urban-hub.com



"We need to build more resilient systems and infrastructures in our communities to prepare for more frequent natural disasters as a result of the climate crises and possible future public health challenges, such as pandemics."



Did you know that in the last twenty years, urbanization has increased in Europe? At EU level, areas dominated by the presence of artificial land increased with 3.4% (representing 12.000 km²) since the year 2000.

Source: biodiversity.europa.eu



What makes a city sustainable?

Photo by Tommv.Krombacher
on Unsplash



Affordable housing:

...is broadly defined as the ability to buy or rent adequate housing, without impairing the ability to meet basic living costs — an increasing challenge facing specific groups, such as low-income households, youth or seniors.

Source: [oecd.org](https://www.oecd.org)



Did you know that there are 1,800 social housing buildings (Gemeindebauten) in Vienna, housing 500,000 people?

Source: [wienerwohnen.at](https://www.wienerwohnen.at)

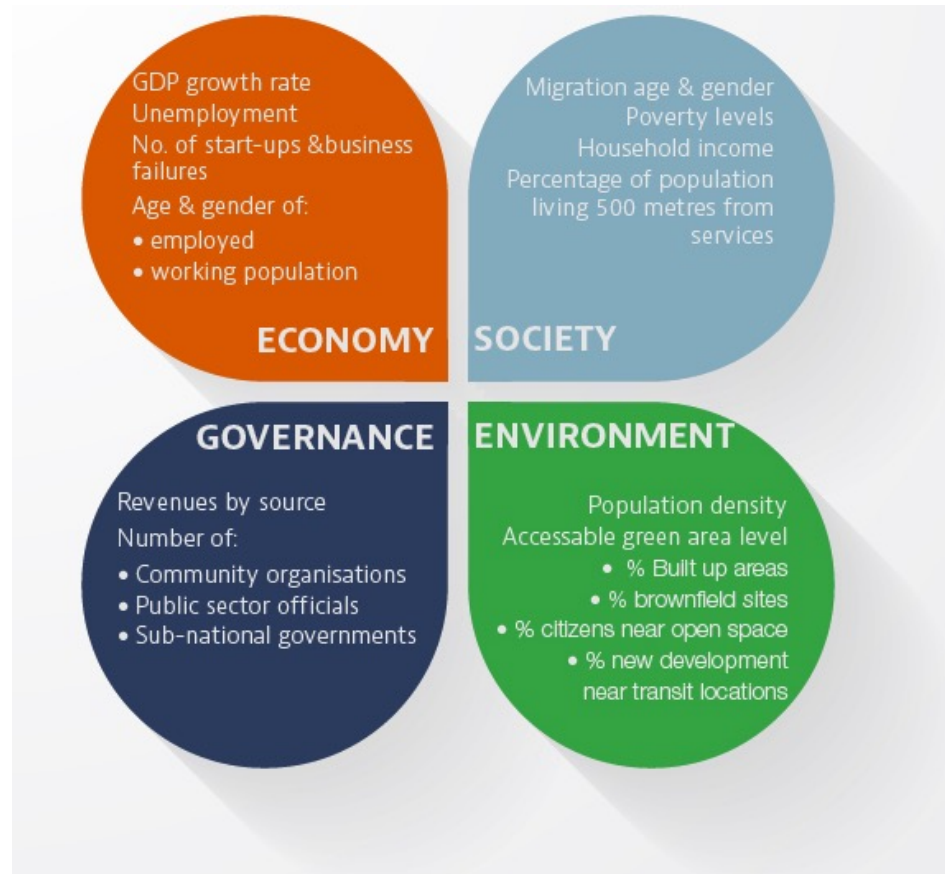
“My American friend was very surprised how public housing is perceived in Europe, being aimed also at the middle class without creating stigma. For him, public housing is just for low-income families, the elderly and people with disabilities.”



11 SUSTAINABLE CITIES
AND COMMUNITIES



Model: measuring city resilience



Source: [oecd.org](https://www.oecd.org)



Did you know that in 2019, 9 in 10 people living in urban areas worldwide were breathing air below the WHO's air quality standards?

Source: [un.org](https://www.un.org)

Subgoals: targets

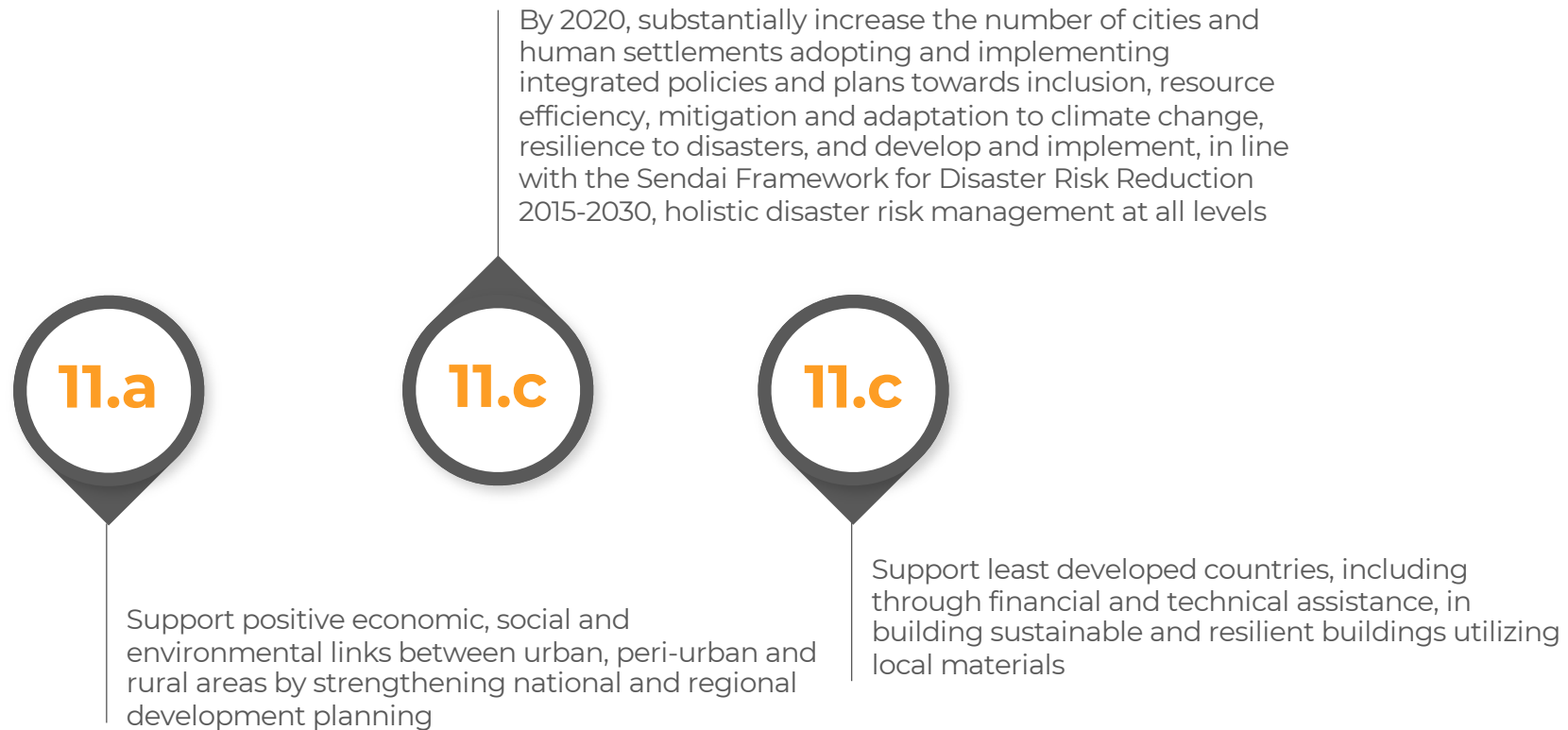


Sources: [bundeskanzleramt.gv.at](https://www.bundeskanzleramt.gv.at) and un.org

Targets = Numbers, Measures = Letters



Subgoals: measures



Sources: [bundeskanzleramt.gv.at](https://www.bundeskanzleramt.gv.at) and [un.org](https://www.un.org)

Targets = Numbers, Measures = Letters

11 SUSTAINABLE CITIES AND COMMUNITIES



**Current state of
sustainable cities
and communities**

Report 2020

The Sustainable Development Goals Report 2020



Source: un.org

The Sustainable Development Goals Report 2021



Source: un.org



MAKE CITIES AND HUMAN SETTLEMENTS INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE

BEFORE COVID-19

SHARE OF URBAN POPULATION **LIVING IN SLUMS** ROSE TO 24% IN 2018



ONLY HALF THE WORLD'S URBAN POPULATION HAS CONVENIENT ACCESS TO PUBLIC TRANSPORT (2019)



COVID-19 IMPLICATIONS



OVER 90% OF COVID-19 CASES ARE IN URBAN AREAS



AIR POLLUTION CAUSED 4.2 MILLION PREMATURE DEATHS IN 2016



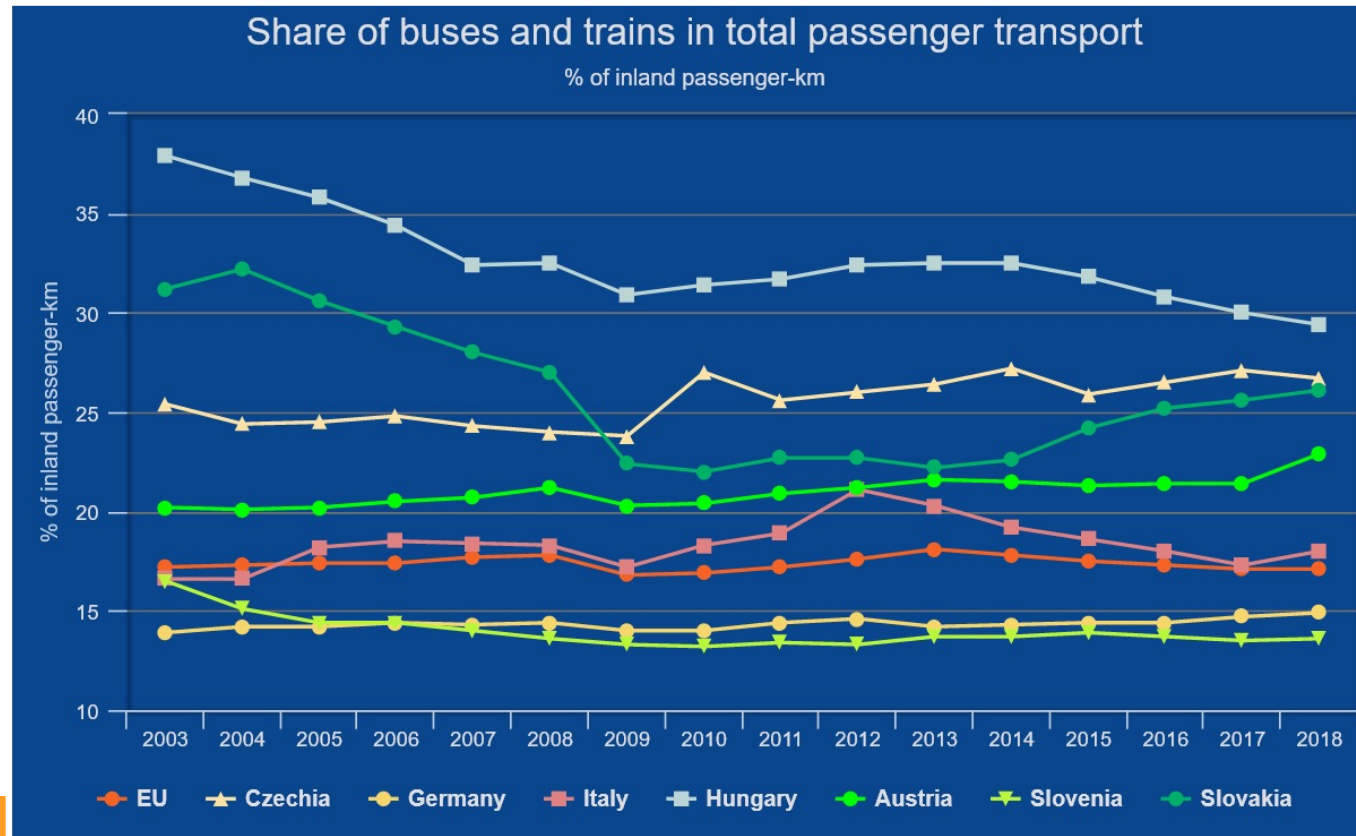
47% OF POPULATION LIVE WITHIN 400 METERS WALKING DISTANCE TO OPEN PUBLIC SPACES



Source: un.org



Some European statistics



Source: ec.europa.eu

Did you know that those who travel most by public transport in Europe are Hungarians, but this share in Hungary is constantly declining, while in Austria, the rate is low, but rising? How about your country?

Source: ec.europa.eu



"I really like using public transport in my city because I don't have to think about parking, and I can still get around easily. In the outskirts though, it can get more challenging to use public transportation exclusively, and in some areas, I still need to use a car to get around at all."



Implementation in Austria as of 2020

Target	National indicators (selected)	Trend
11.1	Very substandard housing	↑
	High housing costs	↘
11.2	Access to public transport	:
11.3	Area consumption per inhabitant	↘
	Total area consumption	↓
	Agenda 21 processes – municipalities	:
11.4	Public expenditures on culture – Baukultur heritage	↘
11.5	Deaths attributed to disasters	↑
11.6	Total municipal waste	↘
	Collection rate for municipal waste	✓
	PM _{2.5} exposure (population-weighted)	↑
	PM ₁₀ exposure (population-weighted)	↑

Source: Statistics Austria. 8-year trend 2010–2018 (if figures missing, at least 7-year trend) in 4 categories (↑ ↗ ↘ ↓) if there is a clear target (quantitative/normative); ✓ (part of the) indicator target achieved; : calculation of trend not possible. More information about methodological questions can be found in the National Indicator Report 2020.

- > Land consumption for buildings, traffic infrastructure and purposes of recreation and mining rose by 8.9% from 2010 to 2018.
- > Per capita municipal waste generation increased slightly, from 562 kg (in 2010) to 579 kg (in 2018). The national collection rate is 100%.
- > The Austrian population’s exposure to particulate matter has declined in recent years but saw an increase in 2018.



Did you know that in Austria, one of the main challenges for sustainable development of cities and communities is the high fragmentation of responsibilities in the Austrian government and other public organizations – making coordination of planning and implementation difficult and slow.

Source: uninetz.at

Main issues to solve in Austria as of 2020



High impact of environmental pollution on health



Above average sealing of ground (destroying valuable green spaces)



Need for more sustainable transportation and affordable sustainability-oriented housing



Did you know that Austria has started using the concept of Social Urban Mining? It is a recovery-oriented demolition of facilities with a special focus on re-use and recycling.

Source: land-oberoesterreich.gv.at

"In Vienna, there is an organization working toward making the building sector more circular. It is called BauKarussell."



11 SUSTAINABLE CITIES AND COMMUNITIES



**Potential
contributions
Learning activity**

Before thinking about potential contributions...

- Imagine an organization (business).
What is the core purpose of this organization*?
- Who are this organization's internal and external stakeholders?
- How do trends (or lack thereof) concerning “sustainable cities and communities” impact this organization (its purpose, its stakeholders, its operation, its viability)?
- What challenges and/or costs emerge for this organization from this “impact of strategies or efforts towards sustainable cities and communities?”
- On the other hand, what opportunities and/or benefits arise?
- With all this in mind, what contributions** might this organization make to reach SDG 11 within its sphere of influence via inward and outward actions?

* Meant here are all sizes, all types

** Consider contributions inside the organization (referring to everything that is a resource to the organization and is directly or indirectly controlled by the organization, for instance, human resources, know how, monetary and material resources) and the outside of the organization (referring to everything outside of the organization that it can influence but lies outside of its control, for instance, policy change, partnering with other organizations, etc...)



Potential contributions by educational institutions

The purpose of educational institutions is to educate and train for life and for particular professional interests.

In terms of SDG 11, the tasks lie in researching, teaching and raising awareness about the need for and many aspects of developing sustainable cities and communities, the benefits and impact on society, and to point to successful models of sustainability-oriented urban development. Additionally, universities should partner with local communities to co-develop urban areas.



Did you know that there were almost 200k students enrolled in Universities in Vienna last year? This makes for a huge multiplication factor that could move the needle for a variety of SDG goals – if sustainability topics were integrated into curricula.

Source: de.statista.com

Potential contributions by educational institutions, cont.

Potential inward actions:

- adjust educational and research programs to include sustainability-oriented urban development
- in cities: plan accessible, sustainable, and green campus development — living campus oases also open to the public
- establish affordable and sustainability-oriented housing options for students

Potential outward actions:

- partner with local communities and businesses as well as with other institutions to co-develop urban areas
- support smart city initiatives with knowledge resources and participation in sustainability projects
- collaborate with local communities to offer internships for students interested in urban planning for sustainable futures

Potential contributions by municipalities

The purpose of municipalities is to plan, manage, and improve public work and services to the community. There is no more important SDG than this one for the work of and for the city. The tasks for municipalities for SDG 11 are manifold and encompass the social, the ecological, and the economic dynamics of systemic sustainability.



Do you know “Grätzloase”? It is a project by the City of Vienna to support ideas and initiatives for coexistence and residential quality in different districts in the city.

Source: [graetzloase.at](https://www.graetzloase.at)



“We need to work together and support each other in order to make our cities and communities healthy, safe and regenerative!”

Potential contributions by municipalities, cont.

Potential inward actions:

- adjust policy and project planning and seek support for the transition (for instance, e5 city / municipality)
- engage in long-term urban/community planning for sustainable futures (use sustainability reporting standards to guide the process)
- prioritize investments in green public spaces, sustainable public transport, and affordable housing

Potential outward actions:

- engage the community in discussing the importance of reuse, recycling and responsible consumption
- include citizens in participatory city development
- co-organise with neighbouring towns community meetings for collaborative smart city initiatives

Potential contributions by corporations and other organizations

The purpose of for-profit organizations (ie business) is to provide a service in exchange for resources (ie money). The purpose of non-profit organizations is to impact society in a certain way — both need to generate and/or collect adequate resources to pay for their operations and activities and/or make profit.

In terms of SDG 11, the opportunities for contribution may vary greatly between different types or sizes of organizations, but their core contributions to society for reaching SDG 11 are for businesses and other organizations to identify what activities should be ceased and which ones should be accelerated and to provide resources, processes, skills and capabilities for addressing urban sustainability challenges.



Did you know that in Austria, companies can provide their employees with public transportation tickets tax free?

Source: [bmf.gv.at](https://www.bmf.gv.at)

Potential contributions by corporations and other organizations, cont.

Potential inward actions:

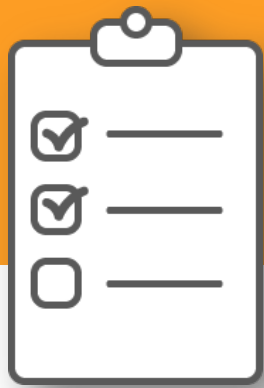
- support employees to integrate and participate in the community
- reform private sector finance investment strategies to support integrated and sustainable urban development like sustainable urban transport, low-carbon buildings, and resilient infrastructure.
- invest in safe and sustainable infrastructure in the community and or city of operation, including lighting, transportation, green spaces, alarm systems, etc...

Potential outward actions:

- collaborate with cities and governments to find solutions to future mobility and sustainable infrastructure by providing technological expertise
- co-develop a sustainable community that brings together relevant stakeholders through a common and neutral platform to jointly analyze, discuss and act on urban functionality, resilience and sustainable development
- work with the local community to provide volunteer opportunities for employees to engage in orienting the region toward sustainable futures



„In my company, we are invited to engage with our local community on paid time. We have already cleaned up a nearby park and participated in a tree planting effort. It was a great experience!“



Activity: potential contributions by an organization of your choice

The purpose of xyz organization is to...

In terms of SDG 11, potential contributions by xyz organization might be:

Potential inward actions:

Potential outward actions:

How do they interact?

Do you need partnerships?



Activity: checking design of potential contributions



Returning to the opening questions:

- In which ways do the designed actions support the core purpose of xyz organization?
- In which ways do the designed actions serve the internal and external stakeholders of xyz organization?
- What balance between costs vs. benefits (or challenge vs. opportunity) can be noticed for xyz organization for “their efforts in developing sustainable cities and communities?”
- How do the designed inward and outward actions cohere and create synergy for xyz impact?



11 SUSTAINABLE CITIES AND COMMUNITIES



**Reflection and
resources
Learning activity**

Reflection and some resources

- Why is there so much focus on cities and their development?
- What are the consequences of rapid urbanization?
- What role can businesses and other organizations play in reaching SDG 11?
- Why do we need smart cities?
- How can public transportation be fostered in urban and in rural areas?
- What is involved in providing affordable housing to city dwellers?

Further Infos:


- [SDG definition of the UN](#)
- [EU progress report on SDGs 2020](#)
- [SDG Compass on SDG 11](#)
- [Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology](#)
- [Urban Ecosystems](#)
- [Infos about affordable housing](#)
- [SDG Report 2021](#)



Activity: SDG journey

- > Put your SDG glasses on and observe your environment under the SDG 11 umbrella for a week and explore the sustainability aspects noticeable in your city and/or community. How affordable is it to live in your area? Do you see homelessness around you? Is public transport easily available? At which frequency is it used? What about waste infrastructure around you?
- > If appropriate and allowed, take pictures of the found circumstances and catalogue the photos (begin making a scrapbook) — they will lead to a final assignment at the end of the series. Before you venture out, it might be a good idea to inform yourself about legal responsibilities when taking photos of people: [oesterreich.gv.at](https://www.oesterreich.gv.at) (If you are not in Austria, look for the regulations of the respective country!)

Possible resource for online scrapbook (free for classrooms and non-profits): [canva.com](https://www.canva.com)



"I know I could use public transport more often. When I use it a lot, I grow to like it more and the small things don't annoy me anymore. I do have to admit though that I go through periods where I stop using public transport altogether for the many reasons I don't like it, and I use them as an excuse to justify going by car."

11 SUSTAINABLE CITIES AND COMMUNITIES



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Slide 4:

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