



MINISTERSTVO
ŽIVOTNÉHO PROSTREDIA
SLOVENSKEJ REPUBLIKY

Local governments and their roles in mitigating climate change

Milan Zvara;

Director of Climate Change Mitigation Department; Ministry of Environment
of the Slovak Republic

General context: Climate change legal framework

- EU and SK long-term target under Paris Agreement is to reach **climate neutrality by 2050**
- The EU 2030 target (-40% compared to 1990) was increased to -55%.
- EU legislation is being revised currently (Fit for 55 package)

Climate Framework for the period 2030 and 2050 in Slovakia:

1. Low Carbon Development Strategy until 2050
2. National Energy and Climate Plan until 2030
3. Emission Trading Act (major emitters)
4. Climate law- under preparation

Local Governments and Low Carbon Strategies

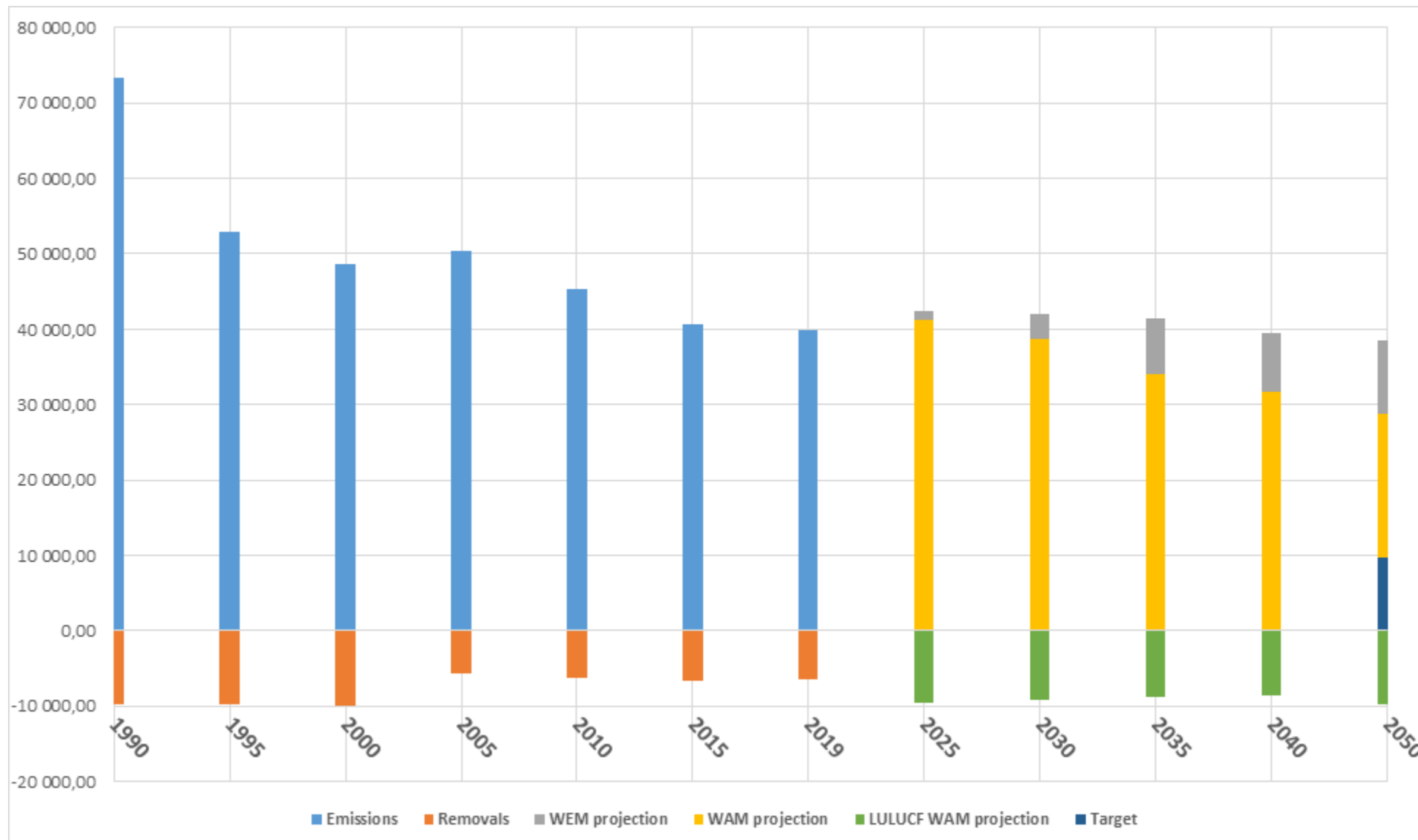
The **main tool** for the regional or urban transformation should be a **Low Carbon Strategy for a particular region/urban area**

Ministry offered a financial support from EU funds for developing such strategies (2018-19)

Web page providing **manual for drafting the strategies:**
<https://www.minzp.sk/klima/mitigacia-urovni-regionov/>. It includes:

- Methodology
- Strategic documents of the Slovak Republic associated with decarbonisation
- List of decarbonisation measures

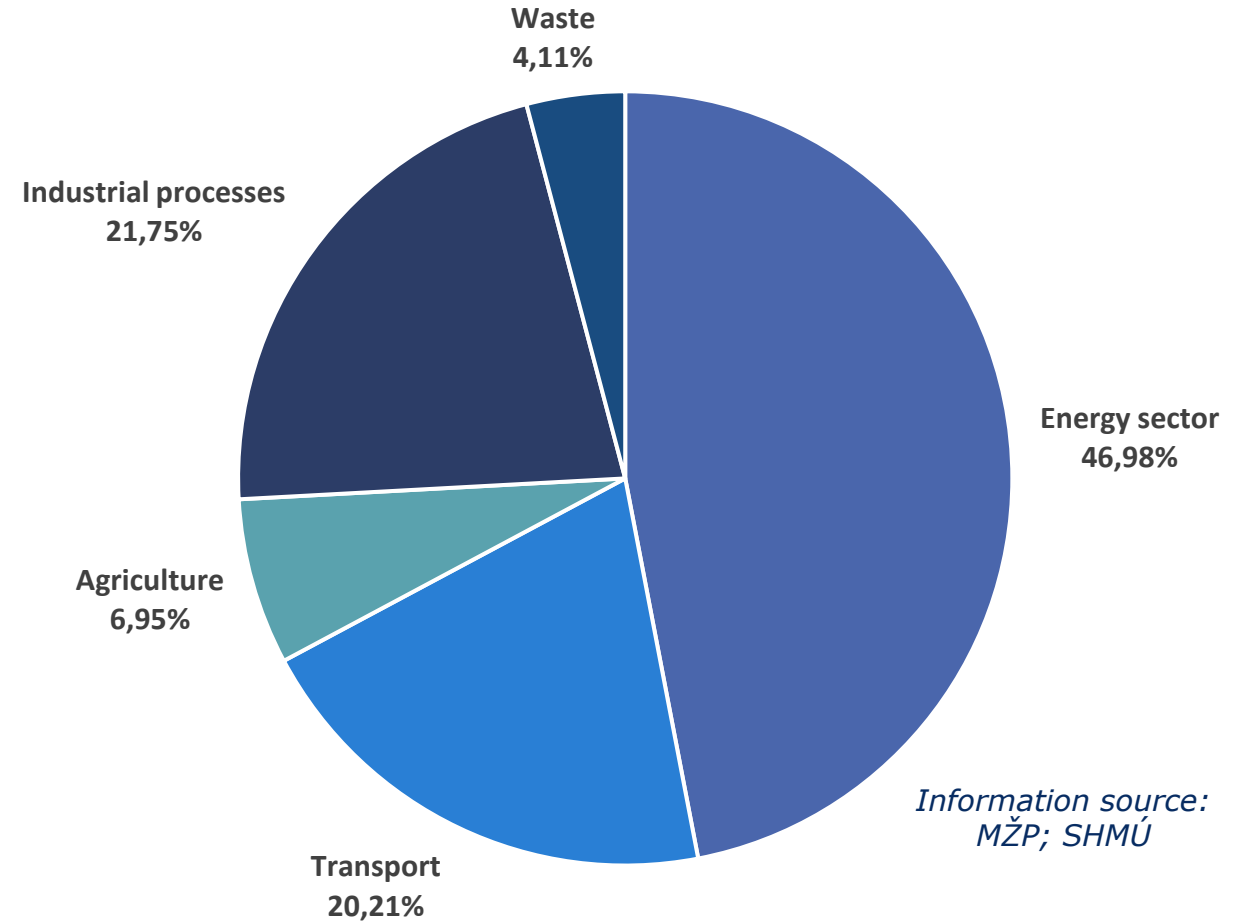
GHG emissions in Slovakia from 1990 until 2050



Information source:
MŽP; SHMÚ

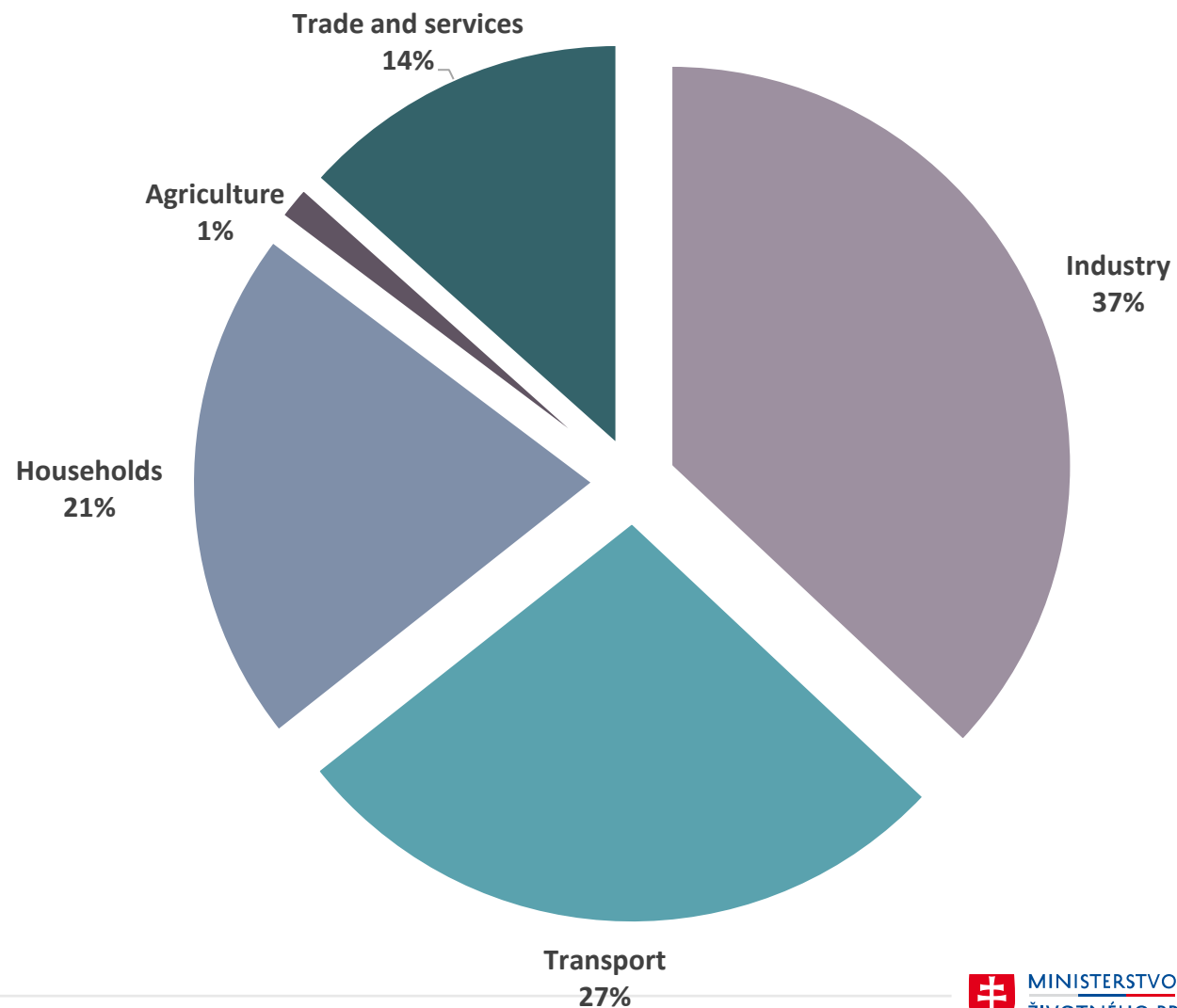
GHG emissions by sectors in Slovakia (2019)

- Total emissions in 2019 on the same level as in 2014
- The crucial sectors with the emission reduction potential:
 1. Energy sector = fuels combusting in industry, households, and institutions
 2. Industrial processes = industry
 3. Transport



Sectors by energy consumption (2018)

- Share of industry sector is above the average
- Growth of transport sector's impact



Information source:
Eurostat

Emission reductions v. regional and national governments

- **Up to 90% of total emissions- 4 sources:** *transport, industry, power production and heating of buildings* –majority is connected with urban areas
- **Only 4% of emission from waste** (landfills, water treatment)- recycling will not solve the climate change problem!
- **More than 50% of emissions** (industry, energy production, district heating)- government has already some effective tools:
 - Carbon price- Emission trading system - EU ETS (60€ per CO₂t eq)
 - Air pollution fees and standards
 - Energy legislations, energy efficiency standards
- **Over 30% of emissions:** *buildings outside of district heating and road transport* (ineffective/not sufficient governmental tools) and majority is connected with the urban areas

Big potential of regional government/cities in emission reductions

Big potential for cooperation between regional and national government in reduction of emissions in two the most problematic sectors:

Buildings and road transport sector

So far no carbon price set, ineffective governmental tools (European Commission proposed to impose carbon pricing in these sectors, it is already enacted in Germany).

- **Buildings sector (part without any carbon pricing):** approximately 12% share on the total emissions; Emissions had declined initially, but they are stagnating last decade
- **Transport sector:** approximately 20% share on the total emission; rising emission trend in the sector since 1990

Cities and emission reductions in buildings sector

State of play: production and consumption of energy for buildings is responsible for 30% of the total emissions (12% not covered by the carbon pricing)

Sector with a significant potential for emission reduction (mutual responsibility of regional and state government)

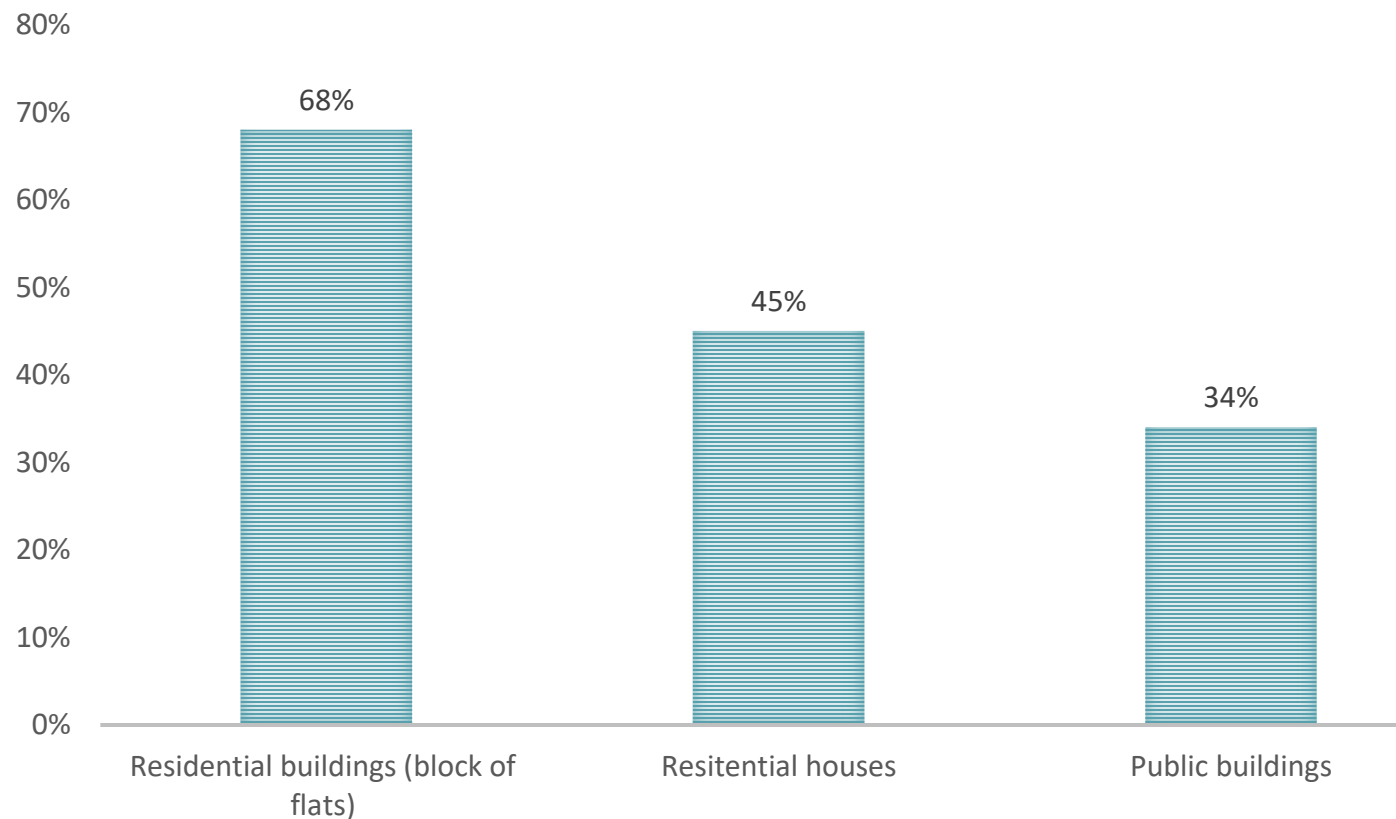
Possibilities: to provide reduction by measurements in:

- Energy production (heating)
- Energy consumption (renovation and energy efficiency)

Plans for the future:

- Systematic and complex renovation including energy source
- Biggest potential-renovation of public buildings (cities and state)-highest number is in **Bratislava**

SHARE OF RENOVATED BUILDINGS BY TYPE FACILITY



Cities and emission reductions in transport sector



Potential of regional governments/cities to help us to revert this negative trend

Cities and emission reductions in transport

To simplify the situation- the 2 biggest problems in Bratislava:

1. Still insufficient infrastructure for alternative and public transport modes
- 2. High density and speed of vehicles and uninhibited movements of cars:**

It demotivates usage of alternative ways of transport (public, bicycle, walking) and has negative effect on:

- High accident rates for alternative ways of transport
- No health benefits for inhabitants of cities
- Building of the cult of the automotive city where no one can live and function without a car

Solution (many examples form the west of the EU):

- Cities will make more difficult for cars to move around the cities

Cities and emission reductions in transport

Examples of some inexpensive measures in Bratislava:

Speed limit of 30
km/h in the city

Installation of
retarders

Cyclists permitted
to enter one-way
streets

Use the right-hand
rule to a greater
extent

Low emission
zones.

Low carbon
strategy for city

Ban for cars during
the European
mobility week

WHY SHOULD IT MATTER FOR CITIES/BRATISLAVA?

Because: Regional governments play a crucial role as they are closest to the citizens and to the two most problematic sectors. They will register impacts through:

Because: Positive impacts in the future- helps them to transform to **smart cities:**



- Positive impacts on the environment and quality of life in a near future
- Transformation will protect the competitiveness of the regions and resilience to climate change



SMART CITY

Bratislava = SMART CITY (in the future)

To turn the human/financial capital into smart solution

requires :



- not business as usual based on fossil fuels, old infrastructures, policies, and measures...



- **To be SMART** = paradigm shift = to be brave to change current way how the thing work
- **To change mindset**= to adjust and mitigate climate change

Bratislava= SMART CITY

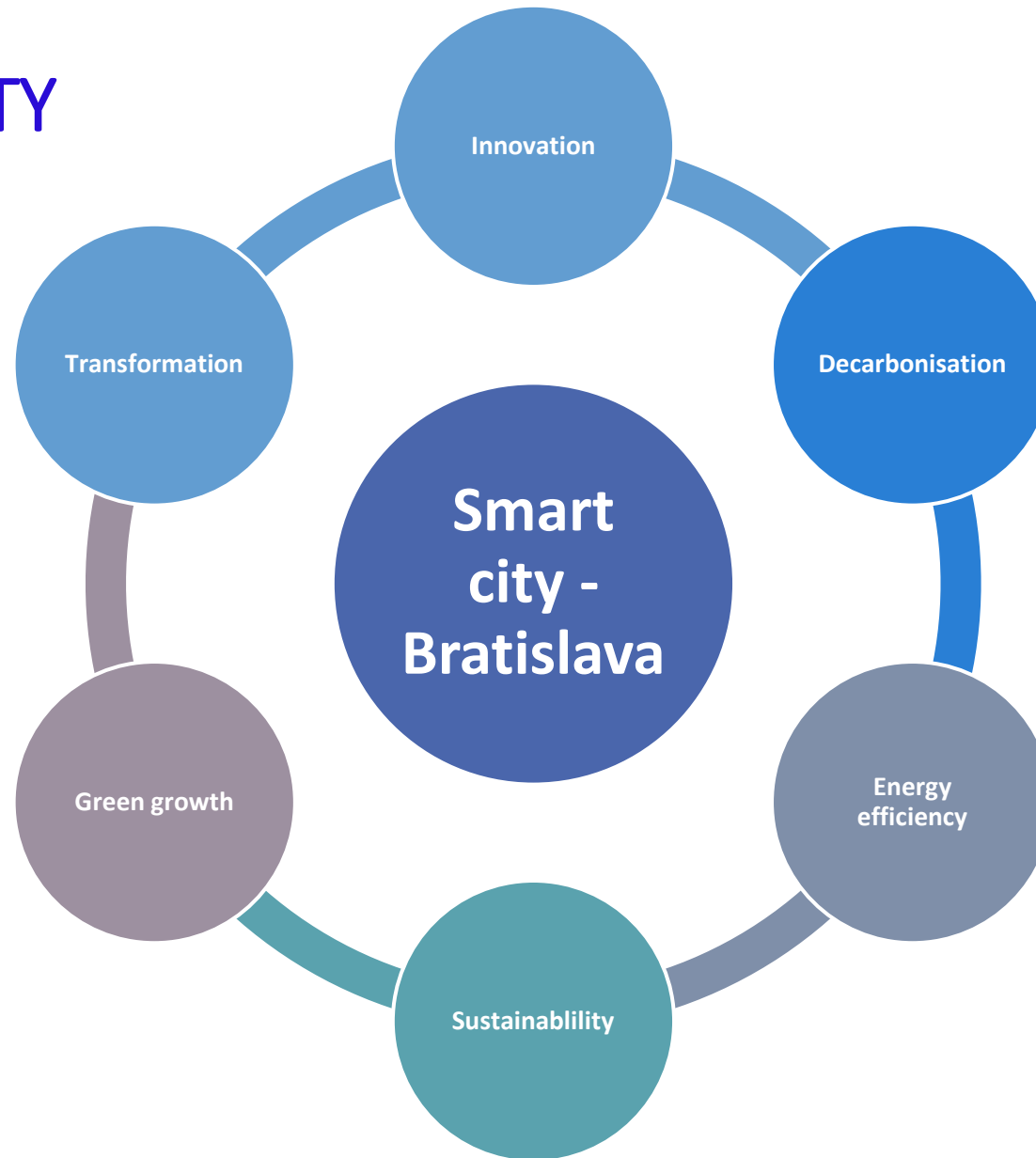
Please do not forget:

Close correlation between

smart
policies

&

climate
policies



....create place
where the life
is healthier and
happier and
future is
brighter

Financial resources dedicated to climate finance

Financial and percentual allocations for the Slovak Republic dedicated to environmental policy (MFF 21-27; in EUR billion)

Financial instrument	European Structural and Investment Funds	Next Generation EU (RRF)	Common agricultural policy	Just transition fund	Modernisation fund (by 2030)	EU ETS revenues (by 2030)
Share (%) of resources dedicated to climate	25%	37%	40 %	100%	100%	30%
Allocation (EUR bil.)	3,2	2,2	2	0,4	2,6*	0,8**

*carbon price 50 € / tonne (current price around 60 € / tonne)

** 30% percent of revenues utilized for the climate measurements according to Act 414/2012,,

Financial instruments available for emission reduction on transport and buildings sector

Revenues from EU ETS scheme (Envirofond):

- thermal insulation for buildings: 15 Eur mil. (2020), 25 Eur mil. (2019)

Modernization fund:

- renovation of heating systems: 100 EUR mil. per year (MŽP)

Recovery and Resilience Plan (RRP)

- Buildings included nearly in all components of RRP (2 EUR billion for hospitals, socio-medical facilities, schools, universities, courts buildings)
- Finance directly dedicated to buildings: approximately 700 EUR mln.:
- 528 EUR mln. residential houses;
- 200 EUR mln. public buildings

Other infrastructure projects:

- Sustainable transport (RRF): 220 EUR billion (cycling infrastructure 100 EUR billion)
- European Structural and Investment Funds: thermal insulating, renewable energy sources, low carbon transport, etc. (no final figures yet)
- State budget: The State Housing Development Fund provides loans