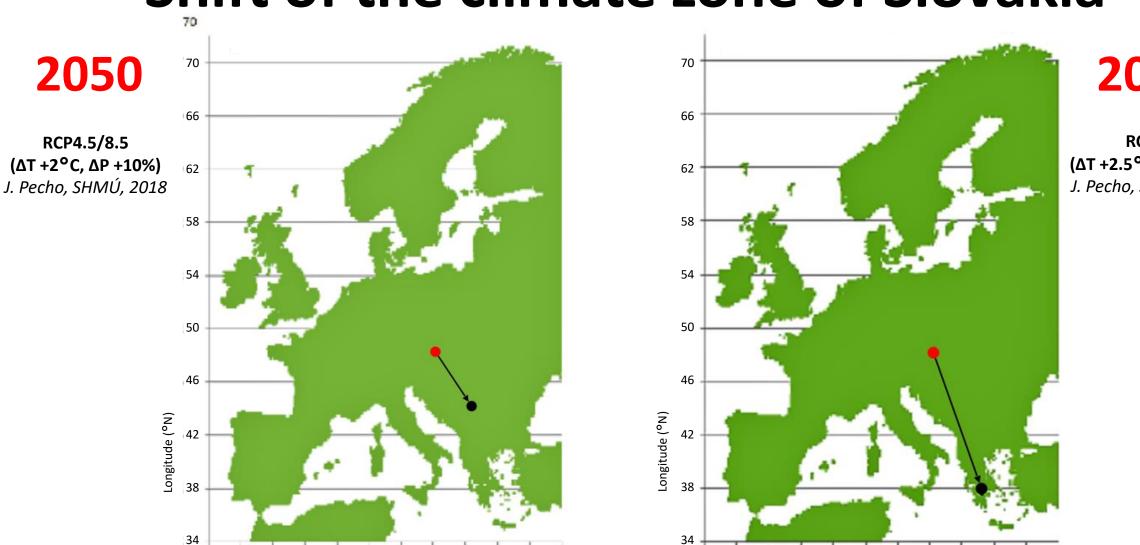


# Regional energy policies & initiatives

SHREC online seminar - SIEA – October 20, 2020 Juraj Zamkovský

### Shift of the climate zone of Slovakia



Latitude (°E)

12

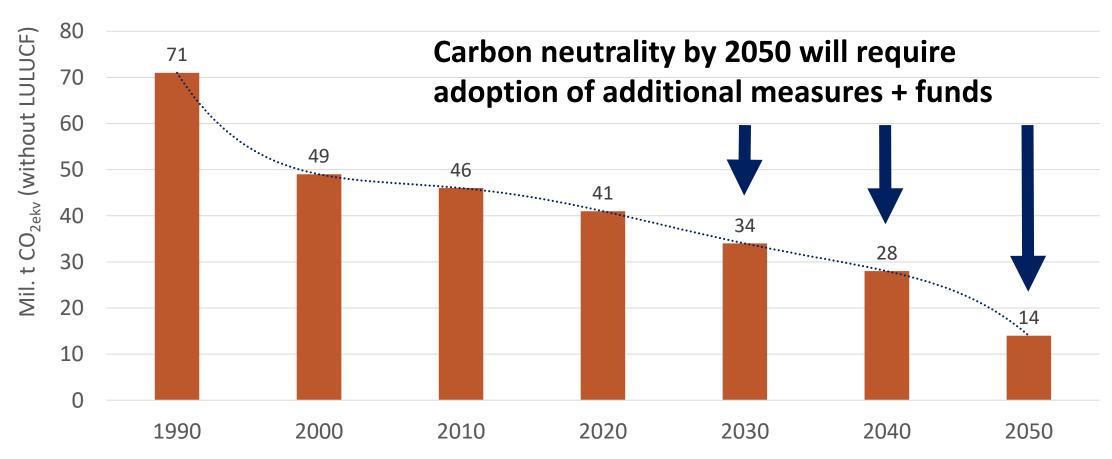
16

-12

2080

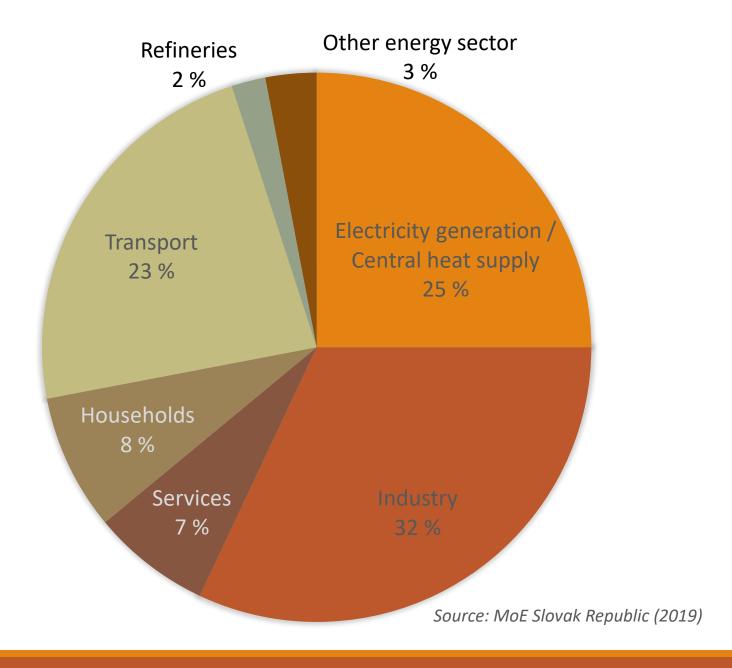
RCP4.5 (ΔT +2.5°C, ΔP +15%) J. Pecho, SHMÚ, 2018

# **GHG** reduction targets of Slovakia



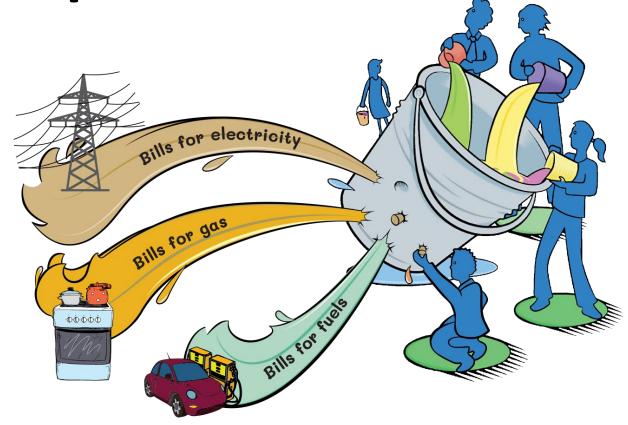
Source: Low carbon development strategy of the Slovak Republic until 2030 with a view to 2050 (2019)

# GHG emissions by sectors

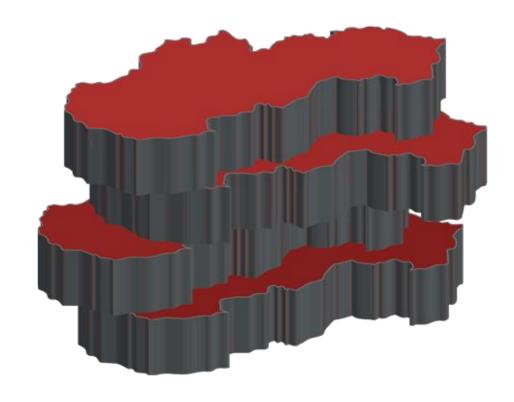


Regional perspective

- Very low climate awareness
- Regional energy policy does not exist
- No personal capacities for regional energy planning
- No methodologies for energy planning available
- Subsidies major motivator for project development
- Subsidy conditions and indicators are often poorly set



# Result – huge energy demand



Present



After optimizing energy needs

# Pilot regional initiatives

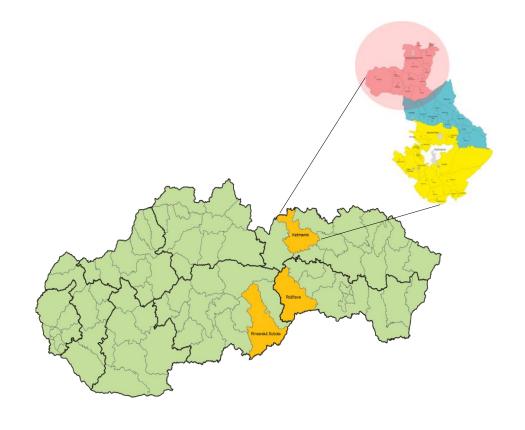
- 2017 2019: Sustainable Energy Centers in 3 lagging regions
- Pilot low-carbon strategies are being developed
- New methodologies tested
- A set of analyses prepared (readiness of municipalities for energy planning, working with information, opinion polls, role of school system and media, etc.)
- Outline of regional energy information system proposed
- Evaluation of experiences, mistakes and challenges will be made in early 2021
  - valuable information for building conditions for a future regional energy planning system in Slovakia



# Low carbon strategies summary and findings

(example: Zamagurie region, E-N Slovakia)

13 municipalities / 6,000 inhabitants Rural area, no major industry Category 'lagging region'



## Summary

#### **Extensive research and analysis in 4 sectors:**

**Buildings** (all residential, administrative, school, health, private and public)

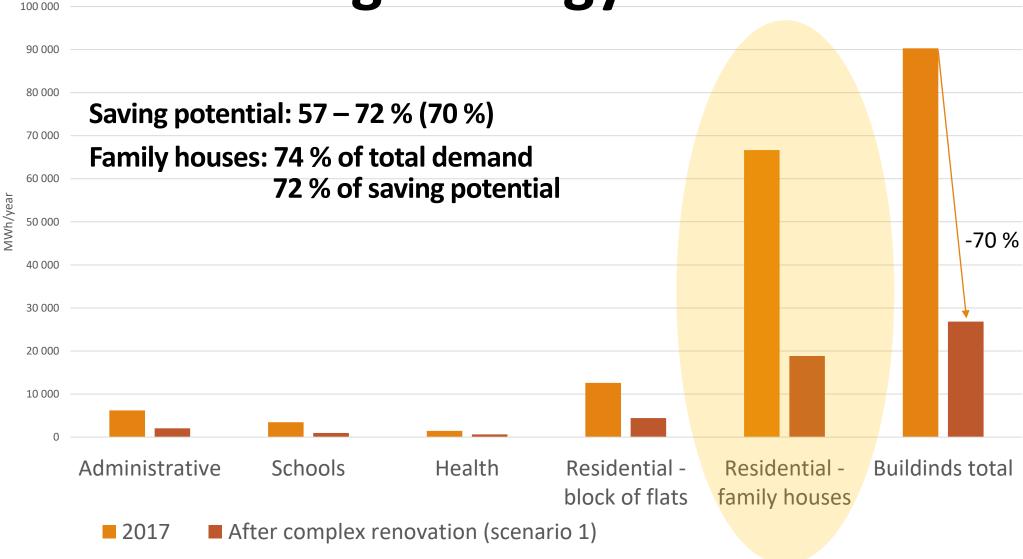
**Transport** (individual and public)

**Public lighting** 

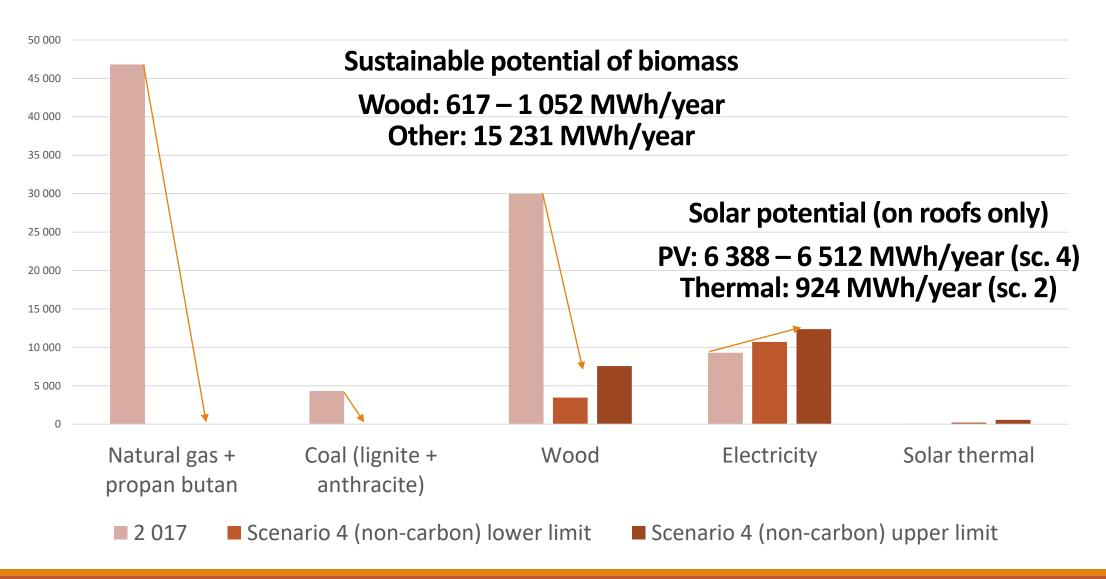
**Energy industry** (commercial production of heat, electricity or fuels)

- → annual energy demand/consumption
- → annual need for different types of fuels / energy
- → annual CO<sub>2</sub> and other pollutant emissions
- → annual leakage of money from the region (imported fuels and energy)

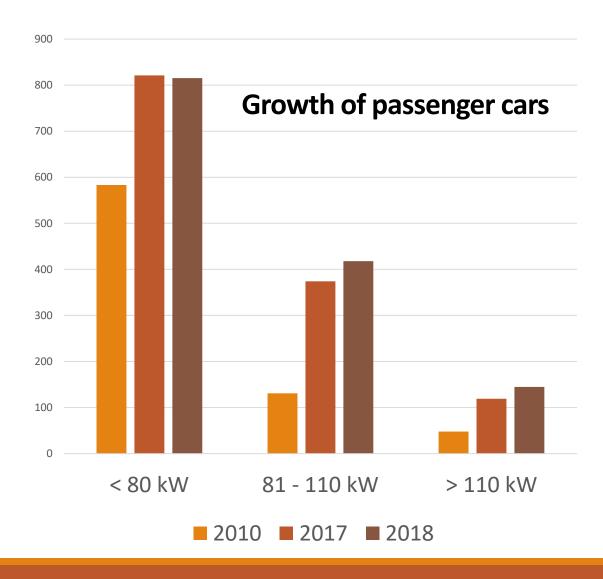
**Buildings: energy demand** 

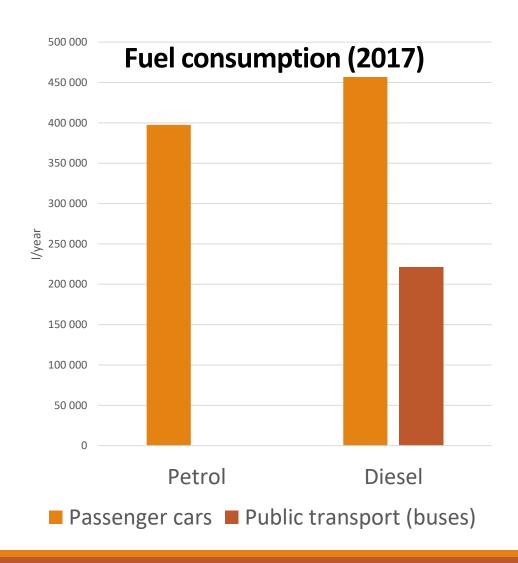


#### Fuel mix: non-carbon scenario

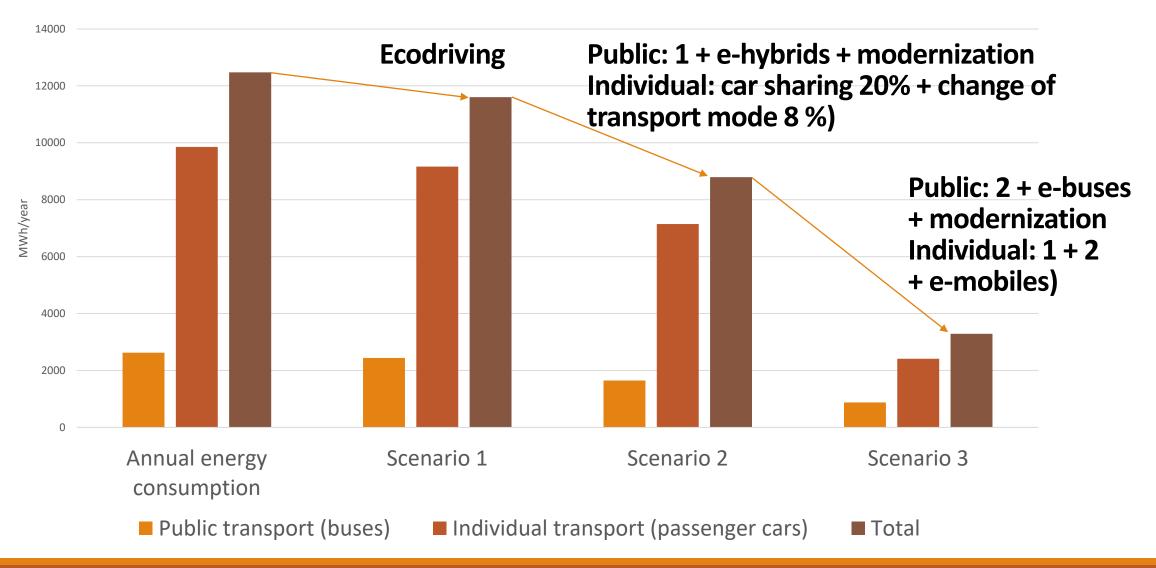


# Transport in the region

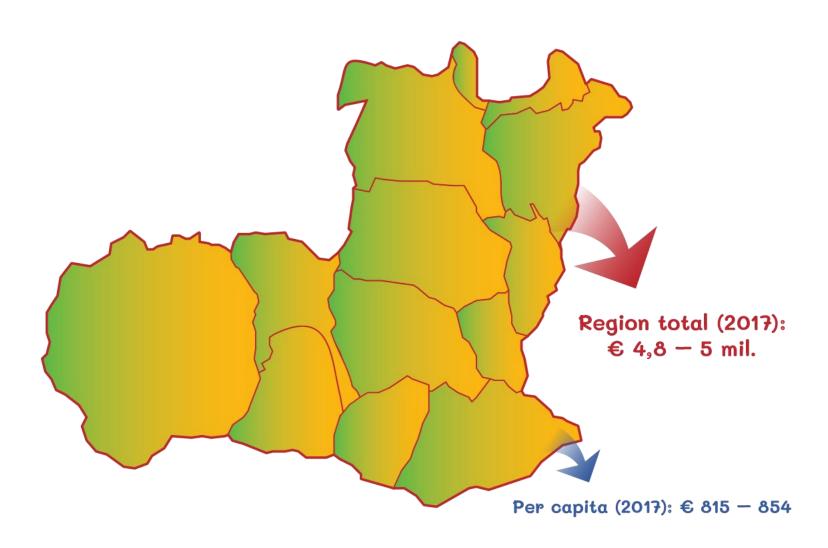




# Transport: potential of savings



# Annual leakage of money (imports)



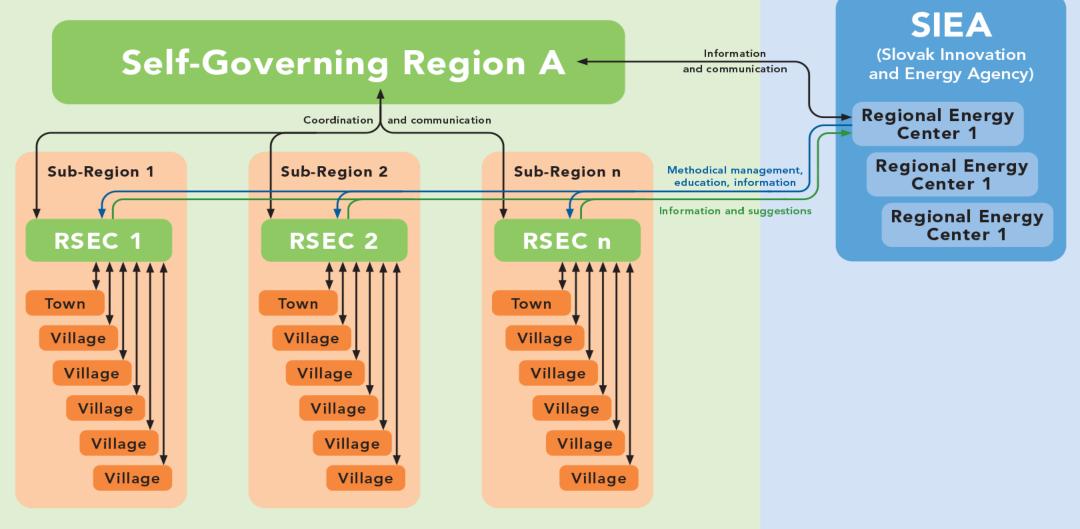
# Systemic regional energy planning as necessary precondition for meeting national energy targets

**Proposal** 

# Regional energy planning/coordination

Level	Title	Basic tasks	Sector
Regional	Regional Energy Centers	<ul> <li>Support for transpozition of national targets to lower levels, monitoring &amp; reporting</li> <li>Management of integrated informational energy system</li> <li>Support for regional planning (methodology, quality control)</li> </ul>	State: SIEA (Ministry of Economy)
	Energy Units (regional gov´ts)	<ul> <li>Territorian harmonization of energy planning</li> <li>Energy management at the level of self-governing regions</li> </ul>	Self-governing regions (8)
Sub-regional	Regional Sustainable energy Centers (RSECs)	<ul> <li>Development and implementation of low carbon strategies</li> <li>Support services to local governments within subregions</li> <li>Support for development of priority subregional projects</li> <li>Transfer of experience, information and good practices</li> <li>Support of energy/climate education</li> </ul>	Organization with a mandate of local municipalities (appr. 58)
Local	Municipal energy managers	<ul> <li>Optimization of local energy demand and consumption</li> <li>Effective management of municipal property</li> <li>Development and implementation of local projects</li> </ul>	Towns and villages (2 927)

#### THE PLACE OF **REGIONAL SUSTAINABLE ENERGY CENTERS** (RSECs) IN THE NEW SYSTEM OF COORDINATION OF REGIONAL ENERGY



New professional capacities of municipalities

Strengthened professional capacities of the state

# Challenges

- Broad **promotion** of the new regional energy planning infrastructure
- Extensive dialogue among key stakeholders on proper administrative structure
- Clear division of tasks and responsibilities among different levels
   (+ linking RSECs with issues/structures focused on climate adaptation, circular economy...)
- Development of new methodologies for RSECs
- Preparation of professional capacities (before establishment of RSECs)
- Preparation of continuous education of RSECs professionals (after establishment of RSECs)
- Selection of the most prepared subregions for the 1st phase

## Thanks for paying attention!

Juraj Zamkovský

+421 908 902 257 zamkovsky@priateliazeme.sk

