

11th International Conference on Sustainable Development 2023

Snapshot about the SDG relevance of the Hungarian ICT SMEs' activities



BME
Faculty of Economic
and Social Sciences



Mária Szalmáné Csete PhD. habil.
Associate Professor
Department of Environmental Economics
and Sustainability



European Center of
Sustainable Development



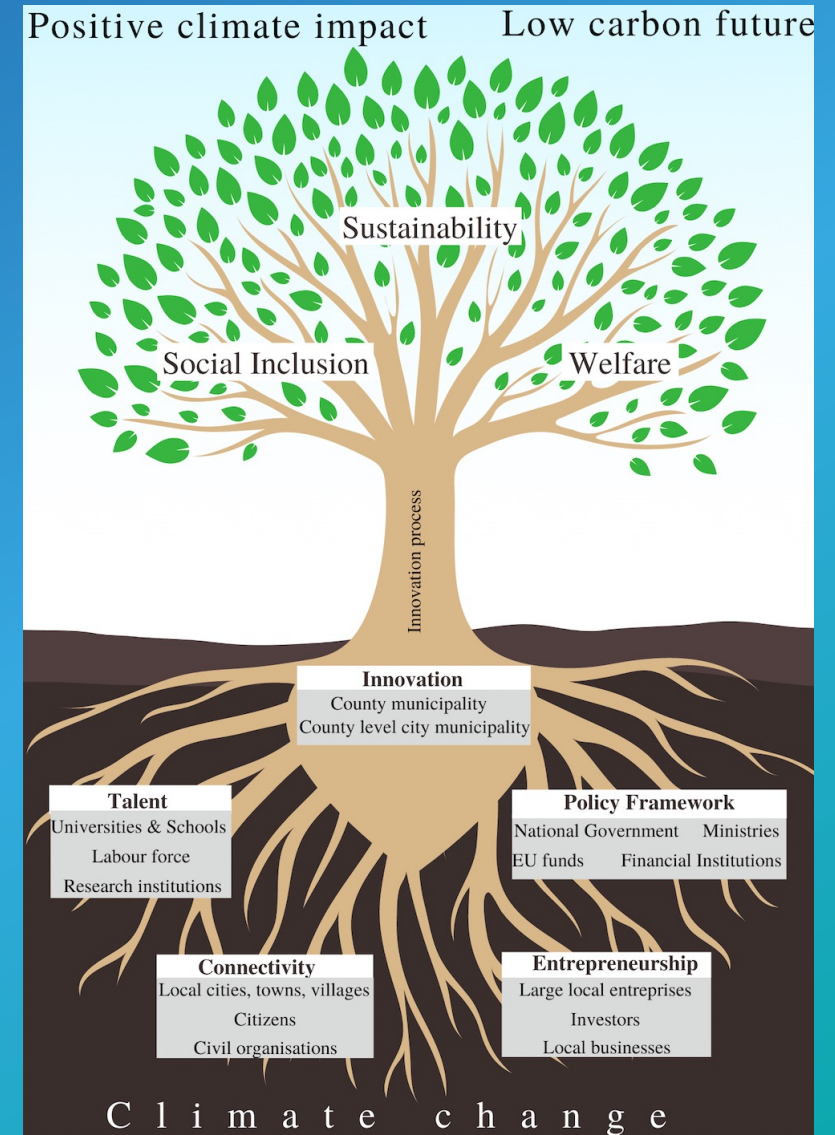
OUTLINE

- Introduction
- Material and methods
- Overview of the addressed challenges and sustainability aspects
- Sustainability and digital transition in the era of climate change
- Survey results
- Conclusion and recommendation



INTRODUCTION

- Sustainability - climate change
- Sectoral and regional contexts for adaptation
- Digital transformation and sustainability transition
- Framework for climate innovation efforts
- Local responses to challenges
- Challenge-based planning

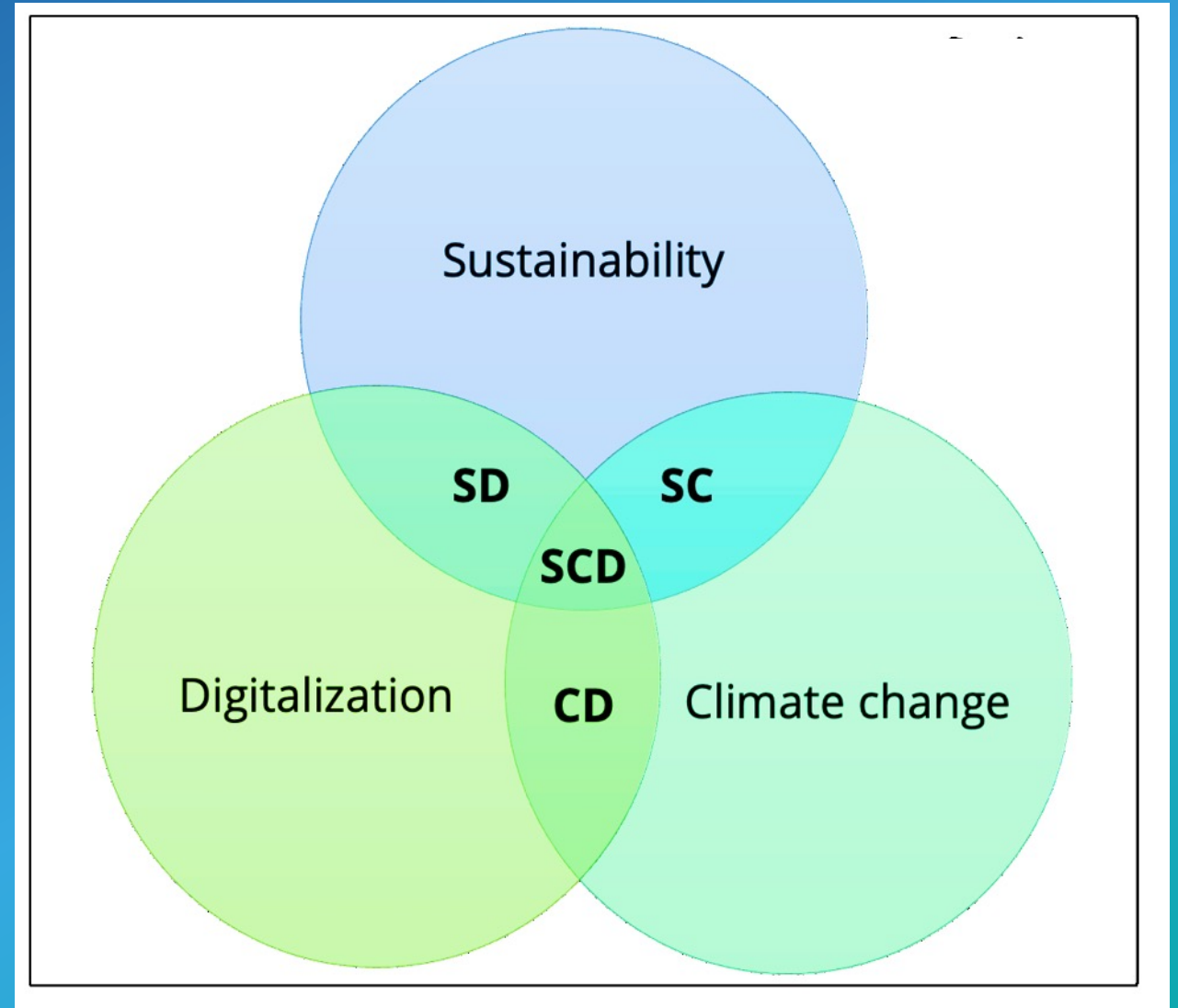


Szalmáné Csete – Barna (2021)

<https://www.inderscienceonline.com/doi/epdf/10.1504/IJGW.2021.119007>

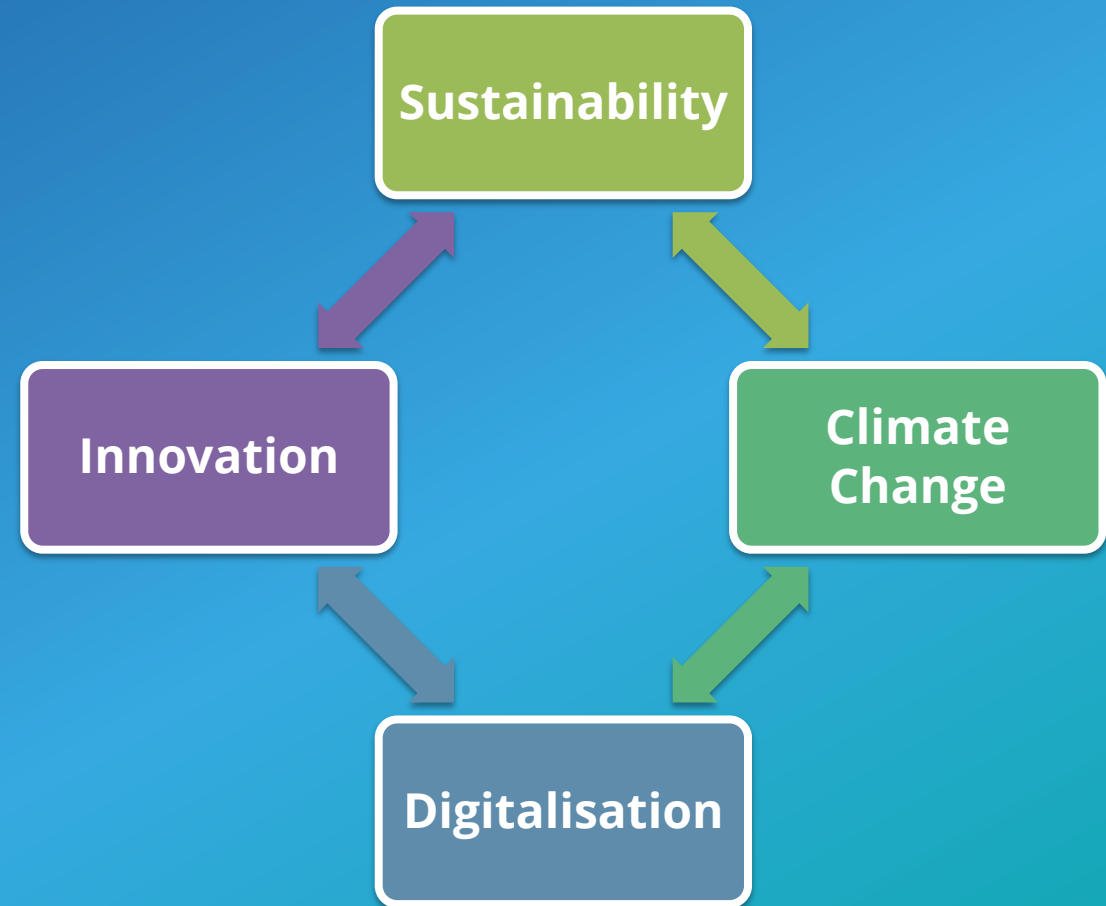
INTERRELATIONS BETWEEN SUSTAINABILITY, DIGITALIZATION AND CLIMATE CHANGE

- SD – digitalization processes and developments serving sustainability;
- SC – sustainable and climate-oriented processes and developments;
- CD – climate-oriented digitalization processes and developments;
- SCD – climate-oriented digitalization processes and developments were serving sustainability



CLIMATE INNOVATIONS SUPPORTING SUSTAINABILITY TRANSITION?

- Management methods
- Indicator-based assessments, measurability
- Sustainability impact assessment
- Climate innovation potential matrix
- Document analysis, questionnaire surveys
- LISA model, statistical analysis

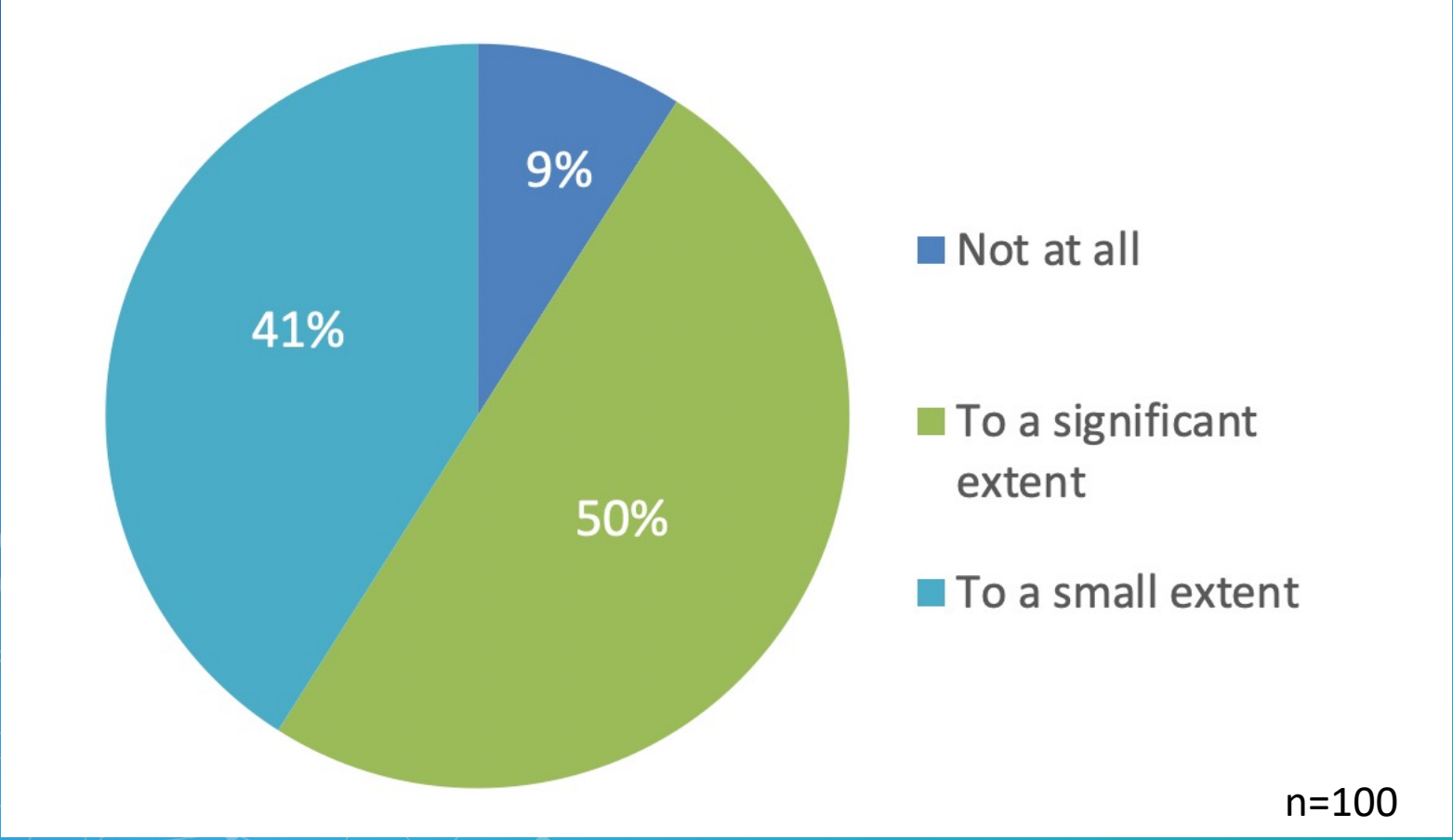


DIGITALISATION AND SUSTAINABILITY

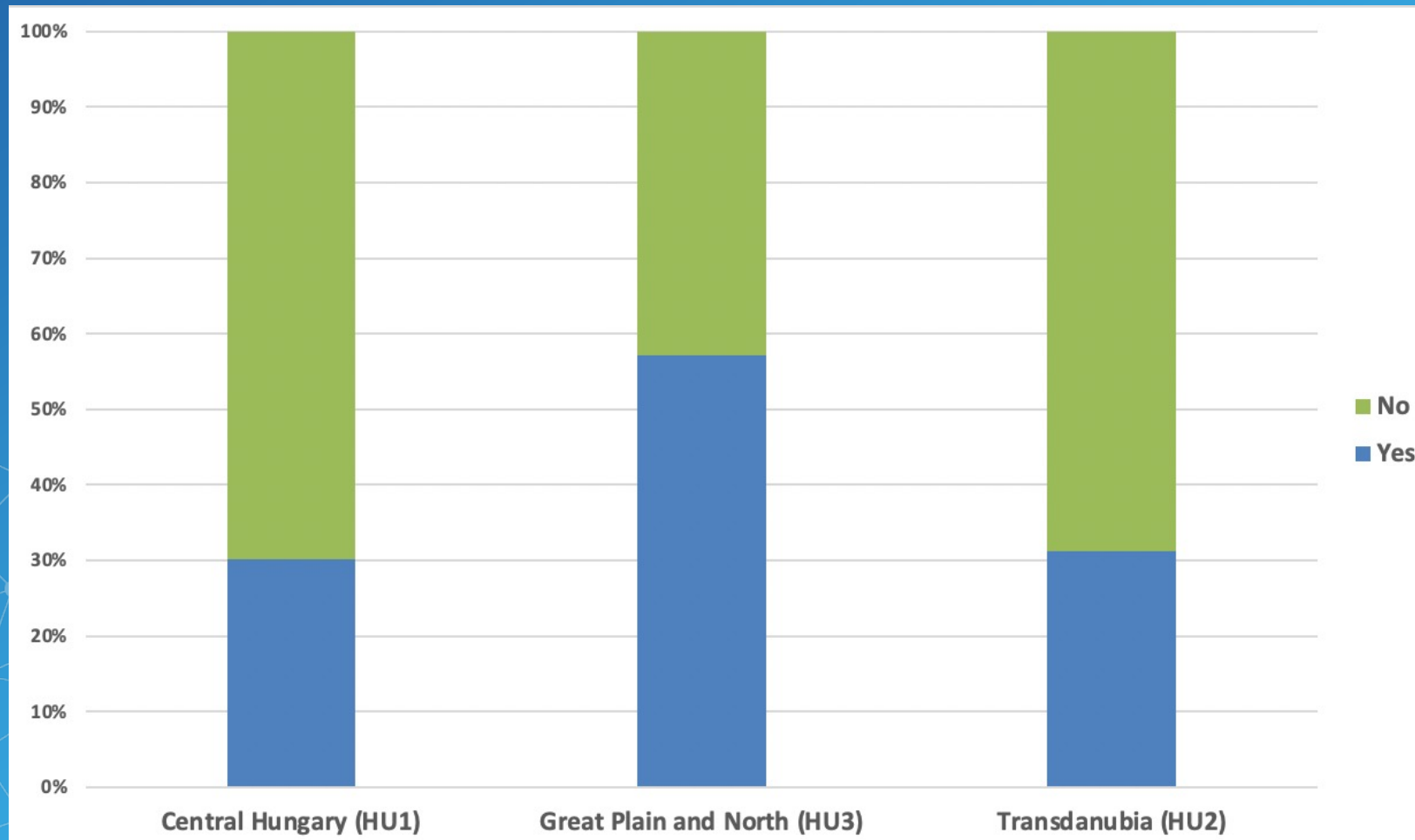
Digitalisation and Climate Change among ICT SMEs in Hungary (2022)

- Questionnaire development, focus topics, main research questions
- ICT SMEs, main activity, headquarters, annual turnover, ownership structure, number of employees,
 - NACE (Statistical Classification of Economic Activities in the European Community, 2008 (Nomenclature des activités économiques dans les Communautés européennes))
 - Small and medium sized enterprises (micro no)
 - Representativeness – regional proportions
 - n=100

How do you think digitalisation solutions can contribute to the sustainability transition?



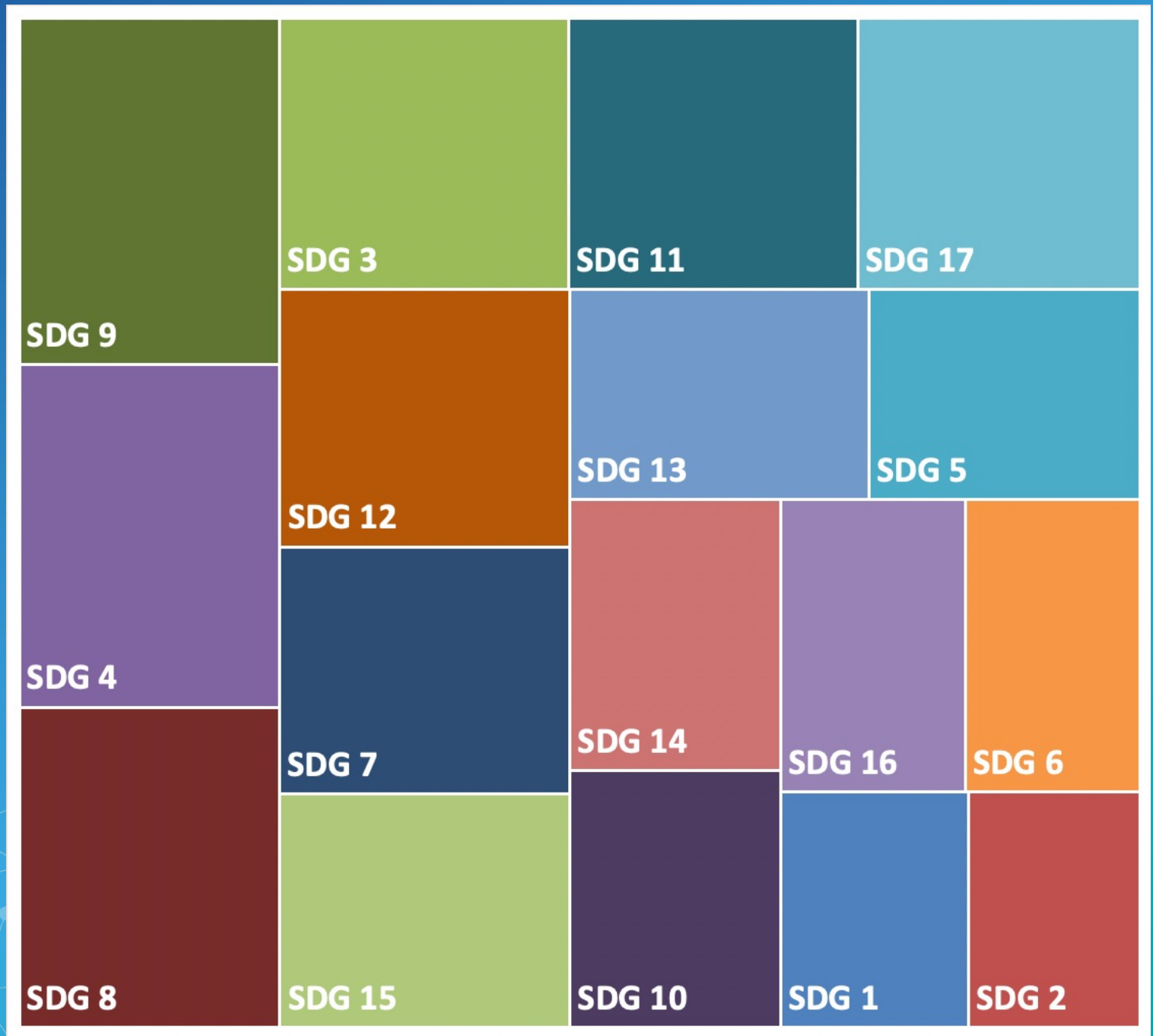
Do the innovative solutions and digitalisation-related developments of your company affect or help vulnerable social groups (e.g. elderly, children, sick, disadvantaged, etc.)?



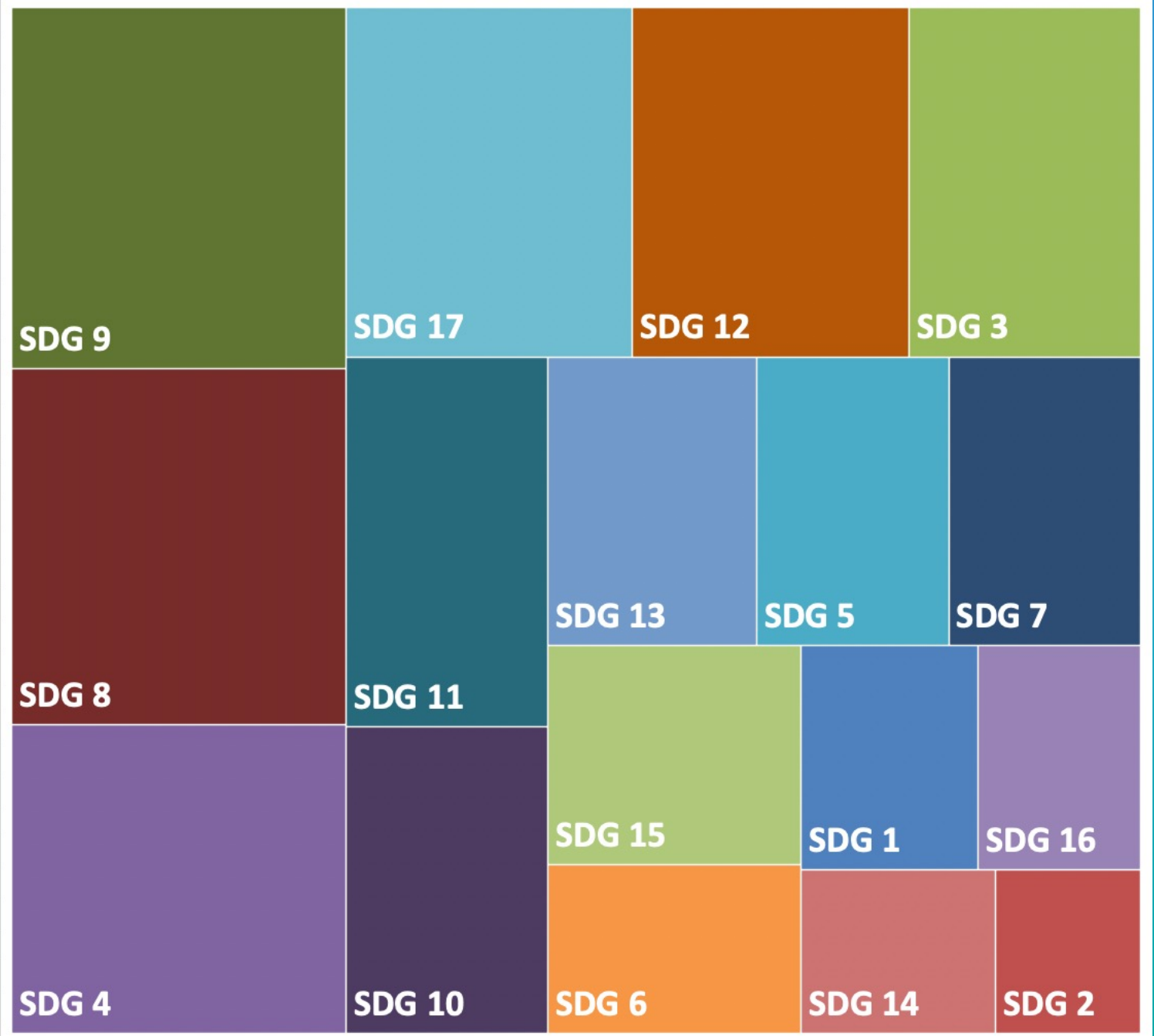
NUTS 1 level

Which of the UN Sustainable Development Goals (SDGs)

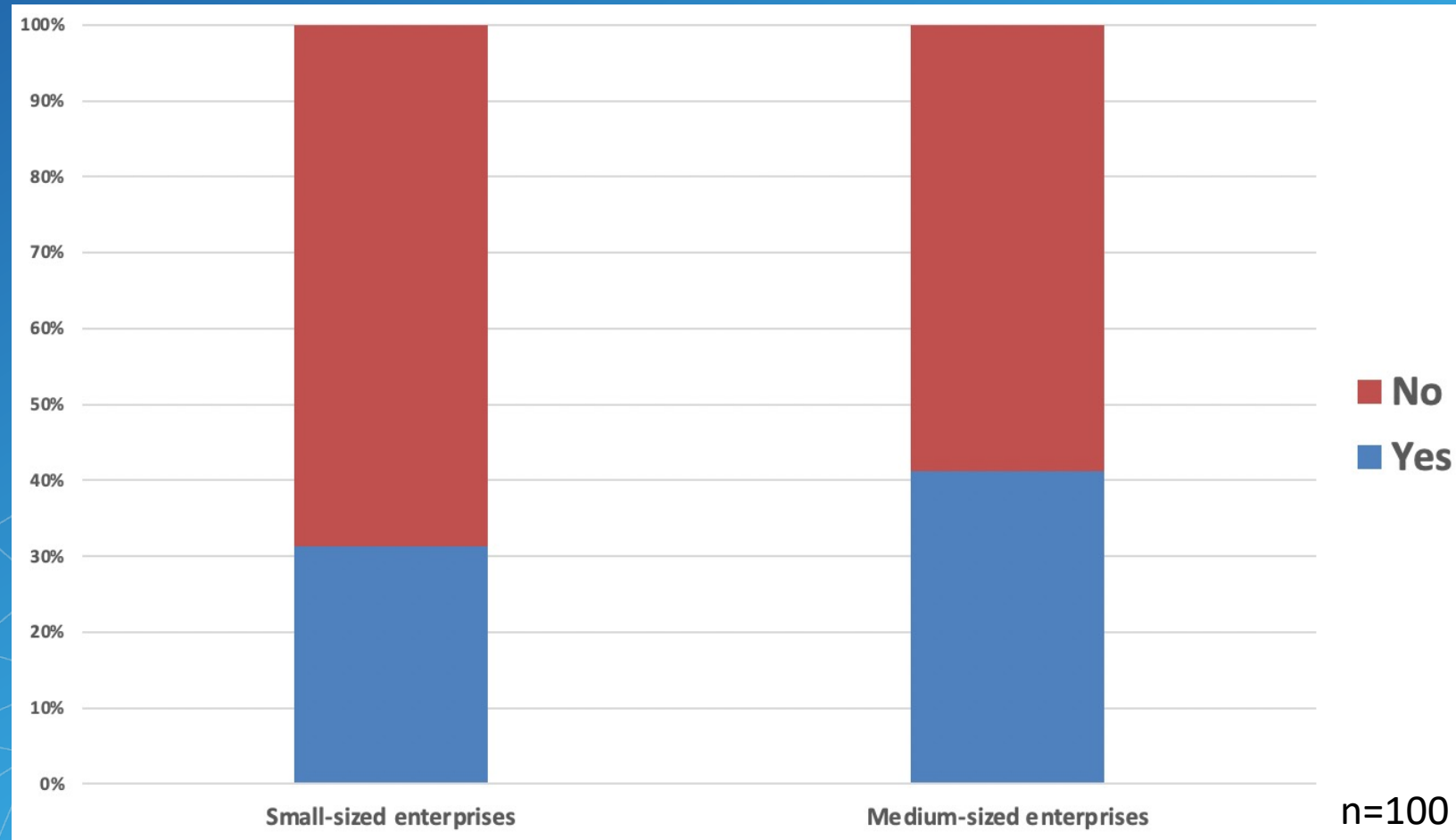
do you think
digitalisation
can contribute
to achieving?



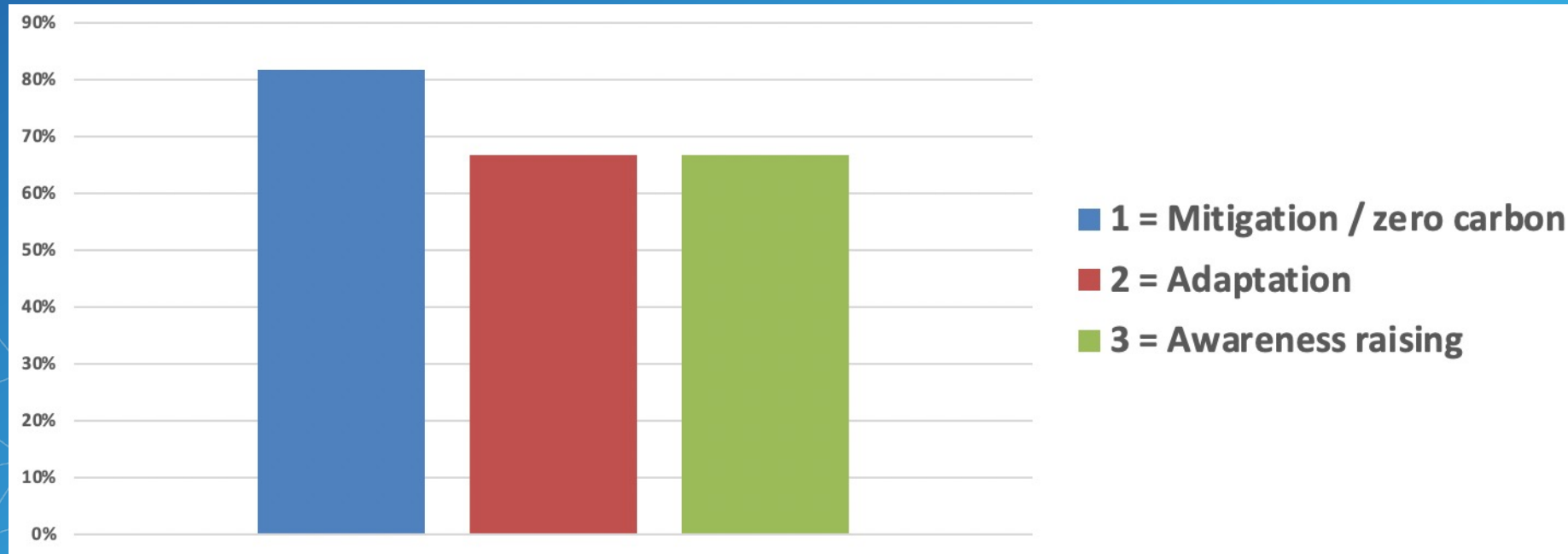
**Which UN SDG
can your
business's
innovative
solutions and
digitalisation-
related
developments
help to achieve?**



Are any of your company's innovative solutions and digitalisation-related developments specifically related to climate change?



To which climate change related category belongs your innovative solution?



CONCLUSIONS

Climate-smart solutions can support the achievement of the sustainability transition goals.

Climate innovation is an innovation that has the potential to mitigate the negative impacts of climate change at some level and/or improve the efficiency of preparing for the expected impacts.

Climate innovation can reduce the vulnerability of some affected social groups.

Digitalisation can also be seen as a means of closing open chains that can influence the achievement of future common goals.

Digital transformation can help to adapt effectively and prepare for the expected impacts, both through sectoral and regional solutions.

11th International Conference on Sustainable Development 2023

THANKS FOR YOUR ATTENTION!

CSETE.MARIA@GTK.BME.HU

This research was funded by the Sustainable Development and Technologies National Programme of the Hungarian Academy of Sciences (FFT NP FTA).



<https://weather.com/en-IN/india/climate-change/news/2021-11-15-arunachal-pradesh-tackles-climate-change-with-pakke-2047>



BME
Faculty of Economic
and Social Sciences