



## EXECUTIVE SUMMARY

It is widely acknowledged that the COVID-19 pandemic has had adverse effects on socioeconomic development globally. However, another important consequence of the virus outbreak has been a severe disruption to planning and decision-making processes at lower (local and regional) levels.

With many actors and organisations experiencing feelings of uncertainty about the future, there is an urgent need to spread awareness amongst decision-makers responsible for strategy development as to:

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the key trends that have been observable during the pandemic and are expected to continue in the recovery period, and

the phenomena and actions at the lower level that could influence trend trajectories and allow for economic recovery.

This policy brief aims to motivate collective responses to shared challenges as they appear, allowing the V4 region to adapt to new circumstances in the quest for sustainable development.

The document is divided into three sections. The first summarises the main research findings by listing the positive and negative trends that are likely to shape the future of the Czech Republic, Hungary, Poland and Slovakia. The second section contains actionable recommendations guiding decision-makers in designing possible responses and thus managing the trajectory of envisaged changes and impacts. The third presents the methodology of the research process.

# RESEARCH RESULTS AND CONCLUSIONS

The study identified **14 trends that could significantly affect sustainable development in V4 countries and assessed the enablers and blockers of these trends.** There were two trends within each of the 7 categories:

Geopolitics, Economy, Technology, Environment, Society, Education, and Health. The wider influence of the trends was considered within the confines of three scenarios:



Scenario 1 – "Somewhat satisfied" – described a future where most of the EU's long-term strategic plans progressed relatively well,

Scenario 2 – "Gritting our teeth" – described a future where the EU had to cope with a cumulation of crises (climate, economic, social) negatively impacting its functioning,

Scenario 3 – "Watching the dawn" – described a future where democracies around the globe were cooperating for the common good.

Out of the 14 trends, six were assessed as impactful on the V4 region's future regardless of the considered scenario and were, therefore, selected as most important:



- Increasing polarisation of societies,
- Emerging energy sector transitions,

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Rising popularity of remote hybrid work,

Growth of artificial intelligence use in the healthcare industry,



Rising popularity of cyberattacks,

Growing number of people suffering from mental health issues.

Three other trends that deserve mention due to their critical influence on sustainability in V4 countries include: Increasing disinformation and circulating conspiracy theories, Persisting gap in quality of education between the V4 countries and better performing EU states, Deterioration of the rule of law.

A particularly interesting result of the study concerned trend blockers. According to the experts' assessment, the blockers that could stop negative trends from developing have a much higher influence on sustainability

than the blockers of positive trends. Moreover, the influence of negative trends on the V4 region's sustainability is much stronger than that of positive ones. A combination of these two facts



leads to a conclusion that is highly relevant from a policymaking perspective: the most effective strategy for reaching the desired level of sustainability has to include policies built around the blockers of negative trends.

## POLICY RECOMMENDATIONS AND IMPLICATIONS

The identified trends are relevant to sustainable, futureoriented policymaking. They will have an impact on V4 countries regardless of the wider developments in their strategic environment, so they are worth a significant degree of scrutiny in the process of planning interventions to maximise their potential and/or minimise any negative consequences: **Increasing polarisation of societies** – the politically, ideologically and economically motivated polarisation intensified during the pandemic and is likely to remain a lasting feature of the V4 countries' societies. To limit the trend's progress, policymakers could:

- consider a balance between the alleviation of the current crisis and the strain on future generations when designing and implementing recovery strategies and plans,
- support companies, start-ups and individual entrepreneurs who develop and offer products and services that contribute to the well-being of societies and the planet (the Purpose Economy),
- be open to effective socio-economic and policy innovations that could help protect vulnerable populations, such as Universal Basic Income,
- initiate programmes that empower workers, activists and vulnerable groups to steer the development of the economy,
- introduce subjects fostering critical thinking skills into primary, higher and adult education.

**Emerging energy sector transitions** – one of the highest rated trends in the study, yet prone to blockers. To limit their effects, the experts recommended:

- recognising the social and ecological dimension in future national, regional and local strategies, particularly when developing KPIs to effectively measure the energy transformation in the region,
- assuring the participation of workers, their representatives, as well as the civil society and social organisations in the forward-looking dialogue and decision-making at various levels (including the organisational and sectoral levels),
- empowering proactive citizens and entrepreneurs to participate in the green transition by introducing reliable sustainability information for consumer products,
- fostering R&D and innovation in the energy sector,
- incorporating households and individual users in energy production through tax incentives and subsidies for the installation of small photovoltaic systems and wind energy production.
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**Rising popularity of remote or hybrid work** – this trend, poised to strengthen due to increased emphasis on maintaining a healthy work-life balance, has certain positive implications, such as the reduction of harmful emissions associated with mobility and business travel. To fully take advantage of this trend, policymakers may wish to:

- regulate the right to telework and remove social security barriers across the EU,
- promote a culture of self-employment,
- > promote decentralised urban planning models,
- overcome cyber-security challenges by adopting smart urban technologies, such as the Digital Twin, loT, 5G and the anticipated 6G technology, as well as developing security systems and local data centres.

#### Growth of artificial intelligence (AI) use

**in the healthcare industry** – a crucial trend due to medical staff shortages, increased treatment costs and the resulting decline in service quality. To enhance the trend's positive effects, decision-makers could:

- stimulate innovative diagnoses and treatment by collecting federated and anonymised health data,
- foster AI literacy through awareness-raising campaigns as well as through primary, higher and adult education highlighting both the benefits and risks of its further development and usage,
- spread information about the EU's digital strategy and the regulatory framework on Artificial Intelligence proposed by the European Commission,
- use regulatory measures to stop the potential consolidation of Big Tech and the formation of AI monopolies.

**Rising popularity of cyberattacks** – to overcome this trend, which would negatively affect V4 countries, experts recommended:

increasing the number of cybersecurity education programmes and adult training schemes in non-technical domains such as defence, politics, economics and law,

- engaging business associations in the organisation of on-the-job training schemes and information campaigns among SMEs,
- offering prizes and organising hackathons in schools to enhance the role of cybersecurity skills,
- increasing the number of public and private sector investments in cybersecurity,
- engaging the civil society in shaping cybersecurity-related legislation,
- ensuring information exchange between relevant national authorities and private companies that operate essential services nationally (for example: energy, transport, banking, healthcare, water supply etc.).

#### Growing number of people suffering from mental

**health issues** – the trend may gain momentum because of the increasing amount of time people spend online (due to, for example, remote work and the social media culture). To limit the trend's negative impact, decisionmakers may:

- foster innovations in labour market practices and working patterns to ensure a greater extent of social well-being, support and community development (the Well-Being Economy),
- launch educational and awareness-raising programmes that would help remove the social stigma of mental illness,
- increase funding and access to AI-based solutions for quick, objective and reliable diagnoses of mental health disorders,
- support the development of AI-based applications to help social media companies remove harmful content and protect their users,
- introduce Universal Basic Income to protect vulnerable groups (for example those who experience professional burnout or long-term illness).

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Additionally, **since the study indicates that the inclusion of negative trend blockers is the key to successful policy development**, decision-makers may also wish to consider fostering and supporting the following actions and strategies to increase the chances of a sustainable future for V4 countries:

- designing policies, collaborative projects and information campaigns that develop solidarity among EU Member States, and combat the notion of second-class citizens, thus decreasing political polarisation and competitive behaviour on the international stage,
- improving the relationship and dialogue between policymakers and citizens to ensure inclusive and impactful participation and strengthen respect for democratic values,

ensuring the existence of media that provide impartial news, a variety of opinions, and credible content which reaches a wide audience,

- modernising governance strategies to ensure social and economic justice in the implementation of climate-related regulations and environmental protection policies,
- increasing the transfer of technologies across the EU,
- enhancing financial support for social and technological innovation,

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- designing and introducing systemic solutions that would strengthen entrepreneurship, support talent and initiative, and reduce bureaucracy and unfair competition in the academic environment,
  - investing in civic education, the development of NGOs and increasing the citizens' engagement in democracy at the local level,
- re-designing the education systems to place more emphasis on critical thinking, increase social awareness and enhance future-thinking skills.

To increase their potential for sustainable **development** and amplify the positive effects of the above recommendations, V4 countries may wish to form an interministerial and interdisciplinary working group dedicated to post-COVID recovery. Such a group could develop joint policy solutions to diminish the future impact of trend blockers in important fields, including energy, social polarisation and the health sector. It could also stimulate multi-and interdisciplinary research carried out by V4 countries with regard to AI development and implementation, as well as cybersecurity. Joint efforts in these two areas could prove much more fruitful than the separate actions of individual states. The group would also prepare regional education policies to highlight the importance of future-oriented thinking among the societies of the V4 region. The possibility of establishing a joint future-thinking education programme for the V4 countries' decision-makers to ensure foresight culture's presence in policymaking could also be considered. Such an initiative would be the best guarantee that legislation would not only answer the needs of today but would also help to attain sustainability goals in the future.







## METHODOLOGY

The present study is the result of a research project entitled "Emerging sustainable innovation pathways towards a post-Covid-19 recovery". It was co-funded by the International Visegrad Fund.

The aim of the study was to collectively envisage an array of potential futures and to discover opportunities that can guide the post-COVID transformation of V4 countries towards desirable sustainable futures and away from undesirable, unsustainable development trajectories.

The research process consisted of three phases. In the first phase, the research team created a database of trends through extensive desk research. Fourteen key trends shaping the future of the V4 region were identified along with 28 factors that could either accelerate or slow down their development. In the second phase, a panel of external experts analysed the 14 key trends and the influencing factors via a Delphi survey. The trends' and factors' impact on the sustainability of the V4 region was assessed, as was the estimated peak time of their occurrence. In the third phase, during a scenario workshop, experts from the V4 region and other EU countries assessed the continuity of trends under the conditions of three challenging EU development scenarios. The aim was to draft a list of actionable recommendations for policymakers that could successfully be implemented regardless of any external challenges.

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### REFERENCES AND USEFUL RESOURCES

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