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Citation for final published version:

Rostami-Tabar, Bahman and Gilliland, Mike 2024. Alliance or apathy? Forecasting's role in achieving the U.N. sustainable development goals. Foresight: The International Journal of Applied Forecasting (74)

Publishers page:

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### [PREVIEW OF SPECIAL FEATURE]

# Alliance or Apathy? Forecasting's Role in Achieving the U.N. Sustainable Development Goals

Bahman Rostami-Tabar and Michael Gilliland

The concepts of *people*, *planet*, and *prosperity* are the cornerstones of the 2030 Agenda for Sustainable Development, a landmark international initiative endorsed by all United Nations member states in 2015. This agenda outlines 17 Sustainable Development Goals (SDGs) representing a shared vision for societal advancement (United Nations, 2015). The 17 goals within the framework are:



Source: United Nations

The SDG framework calls for a profound and sustainable transformation across economic, ecological, and societal domains, engaging citizens and stakeholders on a global scale. However, recent evaluations of progress towards these SDGs indicate an alarming reality: the world is on track to miss many of these targets by 2030 (United Nations, 2023). Even extending the time frame to 2050 provides no guarantee of success if the situation remains unchanged (Crow, 2023). This underscores the critical need for reflection and action across all communities and disciplines.

#### To appear in Foresight: The International Journal of Applied Forecasting, Issue 74.

Since its adoption, the SDG framework has driven the scientific community to produce relevant knowledge. However, only 10% of worldwide research is directly connected with the SDGs (Wastl and colleagues, 2020), demonstrating that scientific efforts addressing the most pressing societal concerns are rather sparse in the larger scientific scene (Messerli and colleagues, 2019). Forecasting has the potential to play a significant role in supporting the SDGs since every SDG-related decision, whether short-, mid-, or long-term, is based on some type of forecast. However, much of the research in the forecasting community is not relevant to the SDGs and focuses on developing or refining algorithms to improve speed and accuracy. Such research disregards critical considerations about the usefulness of these solutions in driving the paradigm shifts required for the SDGs (Rostami-Tabar and colleagues, 2022). Therefore, we argue that it is essential to develop a greater capacity to make forecasting science more relevant to societal challenges and assess how it can assist in achieving the UN SDGs. This process can be beneficial in a number of ways:

- Identifying gaps for improvement: Understanding the limitations of forecasting indicates areas that require more research and practical development.
- Impact on researchers and academia: Understanding forecasting's contributions and limits ensures that forecasting research is meaningful and relevant to sustainability.
- Influence on policy and decision making: Understanding the significance of forecasting helps to inform relevant decisions and build evidence-based policies.
- Community engagement and empowerment: Understanding forecasting's role in achieving SDGs and sustainability highlights the benefits and responsibilities of our community.

In response to this need, *Foresight* will be publishing a Special Feature section in its 2025-Q1 issue with commentary from global experts on the role of forecasting in each of the SDGs. With an aim to advance forecasting practice, we will look at how forecasting may inform SDG-related decisions, its current contributions, and the changes that are needed to connect forecasting research and practice with the SDGs. This special section seeks to increase awareness and enhance the impact of forecasting on these critical goals that have far-reaching consequences for society and the environment.

#### To appear in Foresight: The International Journal of Applied Forecasting, Issue 74.

#### REFERENCES

Crow, J. M. (2023). Achieving UN climate goals needs purposeful, persistent action from science. *Nature*.

Messerli, P. et al. (2019). Global sustainable development report 2019: the future is now – science for achieving sustainable development.

Rostami-Tabar, B. et al. (2022). Forecasting for social good. *International Journal of Forecasting*, 38(3), 1245-1257.

United Nations (2015). Department of Economic and Social Affairs - Sustainable Development. https://sdgs.un.org/goals

United Nations (2023). The Sustainable Development Goals Report. https://unstats.un.org/sdgs/report/2023/The-Sustainable-Development-Goals-Report-2023.pdf

Wastl, J. et al. (2020). Contextualizing sustainable development research. Digit. Sci.



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