

## KEYNOTE 2. Pillars, Doughnuts, Wedding Cakes: Multidimensional Models of Sustainability and Their Implications for Physical Activity

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Climate change is becoming an increasingly pressing problem for global society. For physical activity, it poses a dual challenge: rising temperatures negatively impact our opportunities to be active, while our physical activity behaviour contributes to global carbon emissions. Consequently, climate change is – quite literally – an increasingly hot topic in the HEPA community.

The debate has led to calls for more ‘sustainability’ in physical activity. But what does this really mean? Current scientific notions of sustainability go far beyond climate change. This is reflected in the broad range of United Nations Sustainable Development Goals, but also in scientific approaches like the pillar, doughnut, and wedding cake models, which include planetary boundaries as a central component but add social and economic sustainability as relevant dimensions.

This keynote will aim to provide an overview of existing multidimensional concepts of sustainability and explore their implications for future physical activity promotion and research.

If, for instance, the impact of physical activity behaviour (especially sport in industrialised nations) on climate change is taken seriously, what does this mean for the future of physical activity recommendations, which so far seem to follow a ‘more is better’ and ‘do whatever you like’ logic?

Meanwhile, a deeper reflection of social sustainability may lead to the question of human rights in physical activity promotion and of how to achieve more equity in physical activity. Given the current state of global political affairs, this may include socially and economically disadvantaged groups but also migrants and the LGBTQ+ community.

Finally, from an economic perspective, active transport has rightfully been promoted as a type of physical activity that provides clearly measurable economic benefits to societies. Other aspects of physical activity promotion, however, continue to pose challenges, e.g. the low share of promising pilot projects that are successfully scaled up to a level where they generate actual public health benefits.

Future physical activity promotion efforts will have to deal with these problems and their complex interaction. Difficult strategic choices will have to be made, e.g. whether to focus on adapting to climate change, to try and mitigate its impacts without harming the growth of the sport industry, or to urge the better-off members of society to limit certain physical activities for the benefit of others. In the near future, Europe is about to see a number of important physical activity political initiatives that will have to actively address the issue of sustainability. This includes important updates of WHO action plans, national and international physical activity guidelines, as well as policy monitoring and benchmarking initiatives like the EU’s HEPA Light Monitoring Framework.

