

Transitioning to Net Zero

Enabling and mainstreaming a just transition to net zero through standards



United Nations Climate Change
Global Innovation Hub

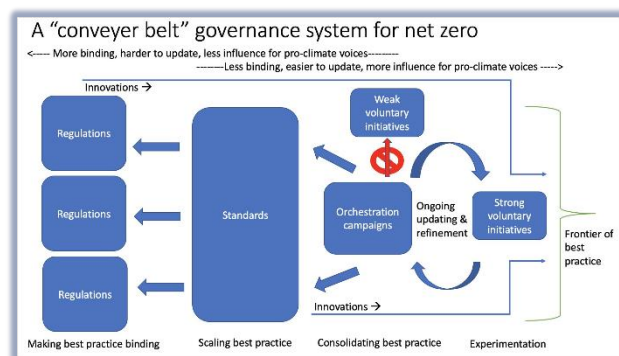
Convened by bsi.

About Our 2050 World

The Intergovernmental Panel on Climate Change (IPCC), the UN's body for assessing the science related to climate change, published a landmark report in 2018 which highlighted the climate change impacts (e.g. extreme weather, rising sea levels and diminishing Arctic sea ice) which could be avoided by limiting global warming to 1.5°C above pre-industrial levels.

To do so, the report argued, would require rapid, far-reaching and unprecedented changes in all aspects of society and global net anthropogenic (human-caused) carbon dioxide emissions to fall by approximately 45 percent from 2010 levels by 2030, and to continue to decline in order to reach net zero by 2050.

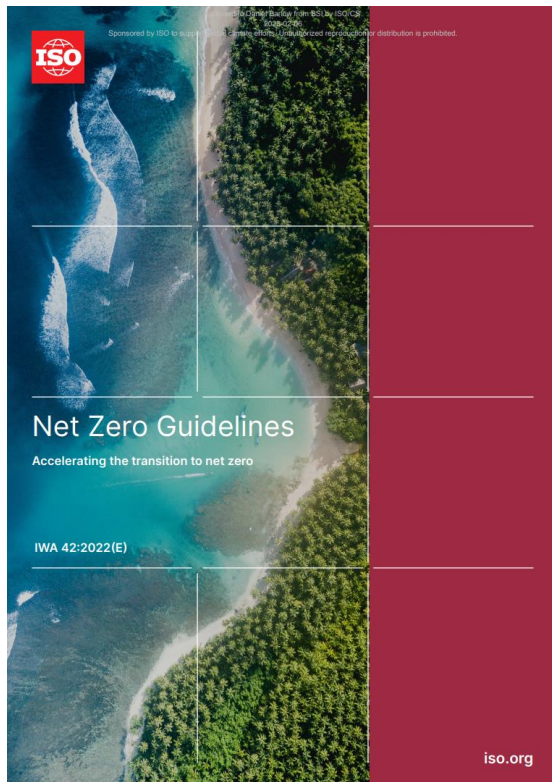
Launched at COP 26, Our 2050 World is a collaboration convened by BSI between the International Standards Organization (ISO), the Race to Zero campaign and the UNFCCC Global Innovation Hub.



Source: 'Governing net zero: the conveyor belt' (Hale, 2021)

This exciting global initiative is working to enable and facilitate a just transition to net zero from voluntary to regulated governance, based on the ['conveyor belt' model for global net zero governance \(Hale, 2021\)](#). It is informed by a comprehensive research programme to support and accelerate the role of standards in climate action.

Our Latest Activity



Led by research, Our 2050 World facilitated the creation of the [ISO Net Zero Guidelines](#) (IWA 42:2022), a core reference text on credible net zero action for the world which was developed through ISO’s International Workshop Agreement (IWA) process.

This new and innovative process brought together market players across both ISO’s member countries and those outside of ISO’s committee system to enable them to negotiate and reach agreement in an agile and inclusive “open workshop” environment.

In doing so, the Net Zero Guidelines development process convened more than 1,200 organizations and individual experts from over 100 countries in a consensus-led process. Further, approximately 75% of participants who took part in the process had never taken part in an ISO IWA before.

Launched at COP27, the Guidelines provide actors at the state, regional, city and organizational / business level with a common reference point by which to obtain credible guidance on net zero action.

Since their publication, the Guidelines have gone on to become a prominent component within the climate mitigation landscape and have set a new benchmark in terms of how standards can drive alignment in net zero action.

“The Net Zero Guidelines... can be used as a core reference text on net zero to bring global actors into alignment, ratchet up ambition and address greenwashing.”

Nigel Topping

UN Climate Change Champion

Our Latest Research

Our 2050 World's research programme continues to develop the evidence on which to base our activity.

1

Maximizing the impact of standards and regulation to drive transformative innovation: a new approach

(July 2023)



A **ground-breaking exploration** into **how standards and regulations can work together** to bring about the **transformative innovation** needed to **accelerate the transition to net zero**.

The research proposes a **conceptual framework** of **standardization and regulation** promoting **transformative innovation**, one which is **the first of its kind**.

The framework is based on a **targeted literature review**, **interviews with key stakeholders** (across academia, SDOs, NGOs, industry, national governments, and other international institutions), and **case studies** of other standards and standards development processes identified to inform the discussion.

[Full paper](#)

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Water Stewardship: current perspectives & approaches

(Due October 2023)



Research featuring an up-to-date **literature review**, **stakeholder interviews** across both the global north and south, and a **mapping exercise** to understand the current definitions of Water Stewardship, the landscape of measurements and initiatives as well as the barriers and challenges to achieving alignment on them - including issues which arise from the lack of alignment – and the potential role for a new standard.

Other key insights:



Standards have already enabled transformative innovation, in fields other than net zero.

Achieving net zero and meeting the goals of the Paris Agreement to limit global temperature rises to 1.5 degrees by mid-century requires wholesale transformation of the economy, rather than incremental change. Conventional approaches to standardization argue that being too ambitious and developing standards with too stringent criteria that the market does not yet have the full capacity to meet can drive stakeholders away and discourage action. However, standards such as ISO 30500 (General Safety and Performance Requirements for the Design and Testing of Non-Sewered Sanitation Systems) were found to trigger transformative innovation. The standard achieves this by going beyond specifying requirements in relation to an existing product, process, or practice - the typical domain of standards – to, instead, ambitiously define the requirements to enable the development of a *new* process.

Applying this approach to develop ‘impossible standards’, which enable the formation of a new technology (in this case non-sewered sanitation systems), could be applied to enable the development of new technologies, processes or practices designed to accelerate the transition to net zero.



For standards to drive the transformation needed, the international standardization system and its standards makers must work with leading international bodies to mandate their development, combat the current fragmentation of the international standards landscape and increase the legitimacy of this new approach to standardization.

To address global challenges such as net zero in a consistent and coherent way, the author argues that leading international organizations, such as the United Nations, should mandate ISO and its members with the development of ambitious international standards designed to drive transformative innovation.



Increasing and diversifying participation in standards drives greater innovation.

To increase the legitimacy and – ultimately – the diffusion of standards designed to drive transformative innovation and increase their impact, the standards development process needs to become more inclusive. For example, including (a greater number) of policy makers and regulators in the development process will help create and tighten linkages between voluntary standards and regulations.

Further, greater inclusivity within the standards development process - to include multinational enterprises and internationally organized NGOs, for example - will also ensure that the resulting standards have global reach, application, and utility.



Standards makers' work needs to go beyond just the publication of standards to facilitating their dissemination and implementation.

Providing users with open and free access to standards, delivering digital/SMART standards (rather than only hard copy/paper versions which can be costly and inefficient for users to use and implement), and including implementation within third party certification processes and services will all help to drive the use of standards.

There is also a need to ensure the content of standards is more regularly reviewed and updated to ensure they keep pace with industry activity and their content remains relevant and useful. In the context of net zero and the pace of change required to deliver the innovation needed, this becomes particularly essential in order to keep pace with the rapidly evolving landscape.



To engender transformative innovation, there is a role for regulatory sandboxes and their alignment with the international standardization system and activity.

With their origins in the financial sector, regulatory sandboxes refer to “a limited form of regulatory waiver or flexibility for firms, enabling them to test new business models [or innovations] with reduced regulatory requirements” (OECD, 2019). Although the

OECD (2021) suggests increasing the use of regulatory sandboxes and international standards, they have yet to be used in combination.

Contact Us

If you would like to find out more about Our 2050 World or to support our purpose, we would love to hear from you. You can reach us here:

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