



Voluntary standards and standardization

A necessity or threat to the circular economy?

Gottlieb, Stefan Christoffer; Frederiksen, Nicolaj; de Gier, Andreas; Köhler, Julia; Gustafsson, Karoline Fogh; Thuesen, Christian

Published in:
Building A Circular Future - Insights from Interdisciplinary Research

Publication date:
2024

Document Version
Publisher's PDF, also known as Version of record

[Link back to DTU Orbit](#)

Citation (APA):

Gottlieb, S. C., Frederiksen, N., de Gier, A., Köhler, J., Gustafsson, K. F., & Thuesen, C. (2024). Voluntary standards and standardization: A necessity or threat to the circular economy? In *Building A Circular Future - Insights from Interdisciplinary Research* (pp. 43-45). BLOXHUB.

General rights

Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

- Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
- You may not further distribute the material or use it for any profit-making activity or commercial gain
- You may freely distribute the URL identifying the publication in the public portal

If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Voluntary standards and standardization: A necessity or threat to the circular economy?

AUTHORS

Stefan Christoffer
Gottlieb ¹
Nicolaj Frederiksen ¹
Andreas de Gier ^{1,4}
Julia Köhler ²
Karoline Fogh
Gustafsson ³
Christian Thuesen ²

ORGANIZATIONS

⁽¹⁾ Aalborg University
⁽²⁾ Technical University
of Denmark (DTU)
⁽³⁾ Lendager Arkitekter ApS
⁽⁴⁾ Enemærke & Petersen A/S

The Danish construction industry has historically relied on legislative measures to drive technological development and the uptake of new practices and methods. While legislation is a significant tool at the disposal of policymakers, policymaking is becoming increasingly polycentric, involving a range of participants, such as industry boards, NGOs, social movements, companies, and national as well as supranational organizations, that all exert influence on the functioning and trajectory of the industry. This development is tied into the decentralization and devolution wave that has spread across societal sectors over the last three or four decades, leading to profound changes in the governance of most industries, with critical implications for their coherence and functioning (Gottlieb and Frederiksen, 2020). Consequently, policymakers have begun to rely on hybrid approaches to regulation, where traditional ‘hard law’ and legally binding instruments constitute only one measure among several in a policy mix of instruments. In addition to hard legislative measures, ‘soft law’ — such as recommendations, industry-developed guidelines, codes of practice, and rules of conduct — is increasingly used as a basis for regulatory efforts. In particular, standards, in the form of norms and voluntary agreements, play a prominent role in policymakers’ efforts to govern industry development and direct companies toward a particular political agenda.

The reliance on standards is evident when obser-

ving that Danish building regulations contain references to close to 100 DS/EN standards. Also, policies on the circular economy refer to voluntary standards as a basis for the implementation of political ambitions. The recent national circular economy action plan, highlighting measures for the prevention and handling of waste, exhibits a strong reliance on voluntary standards and recommendations. For example, the use of the waste hierarchy encourages prioritization of waste types to promote increased circularity. Furthermore, an explicit indicator of the efforts to reduce the environmental impact of construction activities is the designation of projects according to labels and certification schemes such as the Nordic Swan Ecolabel, DGNB, BREEAM, or LEAD. Moreover, to encourage the use of climate-friendly building materials, there is a recognized need to create awareness about the embodied CO₂ emissions of building materials through the implementation of a voluntary sustainability class in the Danish building regulations.

These are examples of how standards are used to inform and implement policymaking at an industry level and to promote the circular economy, which has at least two important repercussions. First, standards and certification schemes are often developed at the industry level by representatives from different companies who are members of committees under the auspices of a standardization organization or an industry council. As such, the design of standards is heavily influenced by private interests that may be directed more towards business opportunities and competitive advantage than concerns for the environment and the common good. Second, measures to change industry practices take the form of what political scientists (e.g., Bemelmans-Vidéc et al., 2011) would refer to as “sermons” rather than “sticks” or “carrots”. Sermons are informational policy tools that use knowledge, arguments, advice, etc. to influence a target group to act, or not act, in a given way. As such, they differ significantly from the traditional command and control policy instruments that either incentivize or enforce action.

Informational policy instruments rely on voluntary compliance, meaning that the effectiveness of such regulation depends on the willingness of individuals and companies to follow prescriptions. This is especially problematic if the

changes necessitated by a policy are significant, or if the policy aims at achieving substantial transformations. In such cases, there may be resistance among the target population, meaning that informational instruments may have limited impact due to the lack of credible enforcement behind them. This means that policies that can support more radical changes, such as the move toward the circular economy, but rely on voluntary standards, may risk being less ambitious, as market players arguably often follow, rather than challenge, existing market relations (Flynn and Hacking, 2019).

REFERENCES:

- Bemelmans-Videc, M. L.; Rist, R. C., Vedung, E. O. (Eds.). (2011).** Carrots, sticks, and sermons: Policy instruments and their evaluation. Transaction Publishers, New Brunswick.
- Flynn, A.; Hacking, N. (2019).** Setting standards for a circular economy: a challenge too far for neoliberal environmental governance? *Journal of Cleaner Production*, 212, 1256-1267.
- Gottlieb, S. C.; Frederiksen, M. (2020).** Deregulation as socio-spatial transformation: Dimensions and consequences of shifting governmentalities in the Danish construction industry. *Environment and planning C: politics and space*, 38(3), 484-502.