Sustainability and Standardization: From Good to Common Practice

Standardization has a long-standing tradition in the Netherlands. Beginning with a standard on the quality of rivets, the Dutch standardization institute NEN was established by engineers in 1917. With changing societal challenges so too has the focus of standardization shifted. In present times, standards are increasingly used as instruments to support sustainability, on a national as well as an international level.

SDGs in the Netherlands

The Sustainable Development Goals (SDGs) have been embraced in the Netherlands. Public policymakers and companies refer to the SDGs regularly. The national bureau for statistics (Centraal Bureau voor Statistiek, CBS) annually publishes a national progress report on the SDGs. This Monitor of Well-Being and the SDGs of 2021 reported that on many SDGs the Netherlands is well underway, but on some of the others, work needs to be done. Most notably, biodiversity is in decline and the share of renewable energy is among the lowest in Europe. National, European and international standards can support businesses and policymakers in achieving these goals.

Sustainability

A prime principle of the SDGs is that they can only be achieved if stakeholders collaborate. Standards are a means to facilitate this since they are developed by stakeholders who are willing to reach a consensus on a certain topic. In the book ‘Changing the Food Game’ Lucas Simons developed a model to better understand the general dynamics around collaboration between competitors to tackle common issues, and how standards play an important role in this dynamic. Although the model was developed for sustainability in international food commodities, it can help us understand the dynamics around standardization for all topics.

The transition towards a sustainable situation goes through four distinct phases of stakeholder collaboration: (i) inception - pilot projects & innovations; (ii) first movers - competition; (iii) critical mass - non-competitive collaboration; and (iv) institutionalization - institutional embedding.

Standards play an important role in this dynamic. In the first phase (inception), collaboration consists mostly of projects between different stakeholders (groups), who are frontrunners. For example, a business and a non-governmental organization (NGO) collaborate on a specific project. As the problem persists, the projects from phase one (inception) develop into a common practice or standard. Phase three (critical mass) is when even more stakeholders realize that the problem is bad for business, cannot be solved by themselves and a standard emerges. The final phase (institutionalization) is when the practice is institutionalized, via legislation or policy.

There are several drivers for standardization, including a crisis and persistence of an issue, public pressure and the realization that adapting your product or service to this societal pressure is a competitive advantage. Depending on the specific sustainability issue, it can be plotted in one of the phases. But the model helps us understand the dynamics around collaboration and the importance of standards.
EXPERT COMMENTARY

Focus Points in Standardization

Standardization in the Netherlands is done via NEN. NEN is a neutral process facilitator. It is the Dutch member of ISO, IEC and CEN/CENELEC. NEN is a not-for-profit organization and its networks consist of over 5500 experts in a wide variety of subjects.

NEN has a number of focal points that can be linked to one or more of the SDGs, most notably the focal points ‘Circular economy’ and ‘Energy transition.’ These focal points are societal issues that are increasingly pressing and where standards can support efforts to tackle them.

Standards concerning circular economy aim to reduce the waste economy and minimize the use of natural resources. Scarcity of resources, pressure on biodiversity and from the public are the driving factors for the circular economy. The circular economy looks at used materials not as waste but as a new resource. Reduction, reuse, and recycle are other ways to look at (used) materials. By agreeing on the quality and safety of processes, products and services, the circular economy gains trust and efficiency, and innovations can become common practice. So far, national standards have been developed to ensure the quality of circular textile and to establish a label on matrasses so the materials can be reused. Standards related to the circular economy can be linked to SDG 12 Responsible consumption and production.

Energy is an important factor in CO₂ emissions and has a big impact on climate change. Standardization for the energy transition is important for the uptake of innovations in this field while maintaining a reliable energy system. Standards for energy sources, transport and distribution, storage, use and efficiency support the shift to a more sustainable energy system. Standardization for this energy transition mostly follows the European (CEN/CENELEC) and International (ISO) agenda. However, a few national standards are tackling the energy transition on a national level. For instance, a highly innovative topic of a Dutch standard is on the urban battery (NEN 4288) that can store solar energy safely in a neighbourhood. Standards for the energy transition can be linked to SDG 7 Affordable and clean energy and SDG 13 Climate action.

A Strong International Focus

Standardization has shifted from the national to the international level. The Netherlands, a trading nation and member of the European Union, naturally has a strong international focus. In 2018 NEN published nearly 36,000 standards of which only 1223 were national standards. All the other standards were European (CEN/CENELEC) or worldwide (ISO).

National standards can be a stepping stone to international standards. It is a means to export Dutch knowledge and innovation. One example of a Dutch standard that might become European is the standard NEN 8775:2020 Fish safety - Method for determination of the fish safety of pumps, Archimedes screws and confined water turbines used in pumping stations and hydroelectric plants. Explorations on feasibility are underway.
Additionally, Dutch stakeholders are actively involved on an international level with more or less active participation in around 600 ISO (sub) committees. Examples of international standardization projects related to the SDGs are the standards series on sustainable and traceable cocoa (ISO 34101) and guidelines for professional farmer organizations (IWA 29). Particularly the stakeholders of IWA 29 Professional Farmer Organizations were keen to explicitly mention the contribution of their standard to the SDGs in the foreword.

Equally, international standardization can be a way to import good practices. The Swedish initiative for an International Workshop Agreement (IWA) with a definition of women-owned business, introduces a new field of standardization that will contribute to gender equality.

To Conclude

The SDGs can only be achieved when stakeholders collaborate. Standards are instrumental to successful multi-stakeholder collaboration. Indeed, sustainability has become an increasingly important subject within standardization. In standards development for sustainability, Dutch stakeholders will continue to take an active role in developing sustainability standards, on a national, European and international level.