

# Innovation and a six-step sustainability action plan for 2022



## How companies approach sustainability transformation



Georg  
von der Ropp



Moritz Gomm



Moritz Gomm is business solution manager of Zühlke Engineering GmbH, a consultancy firm that helps industrial companies innovate and move towards sustainability and digitalization.

Georg von der Ropp is CEO and member of the board of BMI Lab AG, a spin-off of the University of St. Gallen supporting companies in developing innovative business models and building innovation capabilities.

Moritz and Georg lead the Sustainability Circle, a network for manufacturers to exchange experience, network, and have access to expertise on sustainability solutions.

Just when digitalization as a megatrend has been fully embraced in corporate strategies, now the second megatrend arrives with great force: the socio-economic transformation towards a sustainable economy and society.

Both trends share the fact that they affect almost all areas of a corporation and therefore need to be addressed in a cross-disciplinary manner. Both digital transformation and sustainability transformation require action on two levels: transformation of the existing core business, and tapping into new business opportunities created by digital technologies or by green tech and the circular economy. Innovation is at the core.

To successfully achieve such transformation, an innovative mindset is crucial. Companies that focus on customer centricity, agility, or even collaboration with startups as part of digital transformation will be able to combine sustainability transformation with profitable growth more quickly and effectively.

Companies that see their sustainability transformation as an opportunity for innovation are offered a wide range of potential benefits:

- Greater resilience through reduced dependence on resources and avoidance of supply bottlenecks.
- Improved customer loyalty and attractiveness for employees through sustainable business models.
- Preparedness when regulation kicks in.
- Unleashing creativity based on higher environmental and social goals.
- Strengthening brand and image.

Sustainability requirements are new for many decision-makers, but what needs to be done is relatively straightforward. We have developed a sustainability action plan based on consulting experience as well as

discussions with more than a hundred leaders from 40 manufacturing companies in Germany, Switzerland, and Austria who have participated in the Sustainability Circle, a German-speaking network of manufacturers on the path to sustainability transformation. The sustainability action plan addresses six areas:

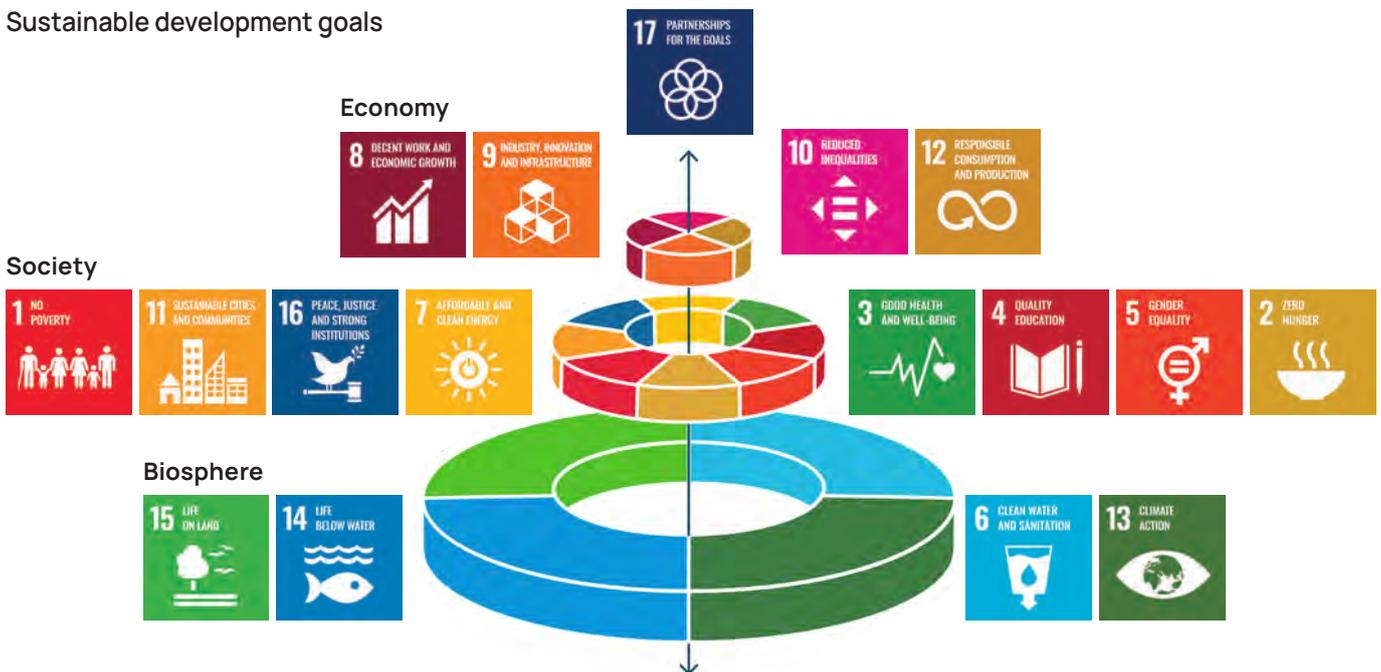
1. Sustainability strategy
2. Targets and reporting
3. Sustainable products and services
4. Sustainable supply chain
5. Sustainable business models and circular economy
6. Organization and culture

### 1. Sustainability strategy

Sustainability has long since ceased to be just another box to tick and is now a strategic factor for a company's competitive positioning. After all, not only are end customers increasingly demanding "green products," but investors are looking for "green investment opportunities," and in B2B business, sustainability is becoming a hard factor in awarding contracts. Legislatures are also increasingly laying down binding requirements for sustainable action through laws and regulations.

Top management must as a result develop clear and coherent positioning with regard to sustainability: What does our company stand for? What added value do our products and services offer in terms of people, profit, and planet? To which of the seventeen Sustainable Development Goals (SDGs) of the United Nations can we as a company make a specific value contribution? From this, particularly effective levers for more sustainability in the company as well as strategic sustainability goals can be determined.

### Sustainable development goals



Source: United Nations; Stockholm Resilience Centre

## 2. Targets and reporting

In terms of a company's reduction of carbon emissions, management must define strategic targets as well as corresponding measurement criteria. The Science-Based Targets Initiative (SBTi), a partnership between CDP, the United Nations Global Compact, World Resources Institute, and the World Wide Fund for Nature, has defined three sources or "scopes" of emissions: the company's own activities (known as Scope 1), the purchase of energy and air conditioning (Scope 2), and all activities in the upstream supply chain as well as the use of the company's own products in the use phase (Scope 3).

Sustainability reporting is necessary to ensure the effectiveness of the measures and to present the company's own actions to third parties. Standards are already becoming established here by different governmental and scientific entities and NGOs.

Transforming one's existing core business also means creating transparency of one's own footprint. This is possible both at the level of individual products and at the corporate level through life-cycle assessments. The most important environmental impacts and opportunities can be derived from the results and corresponding fields of action can be defined. The measures include, for example, decarbonization by avoiding fossil fuels, improving energy efficiency, or eco-design of products.

## 3. Sustainable products and services

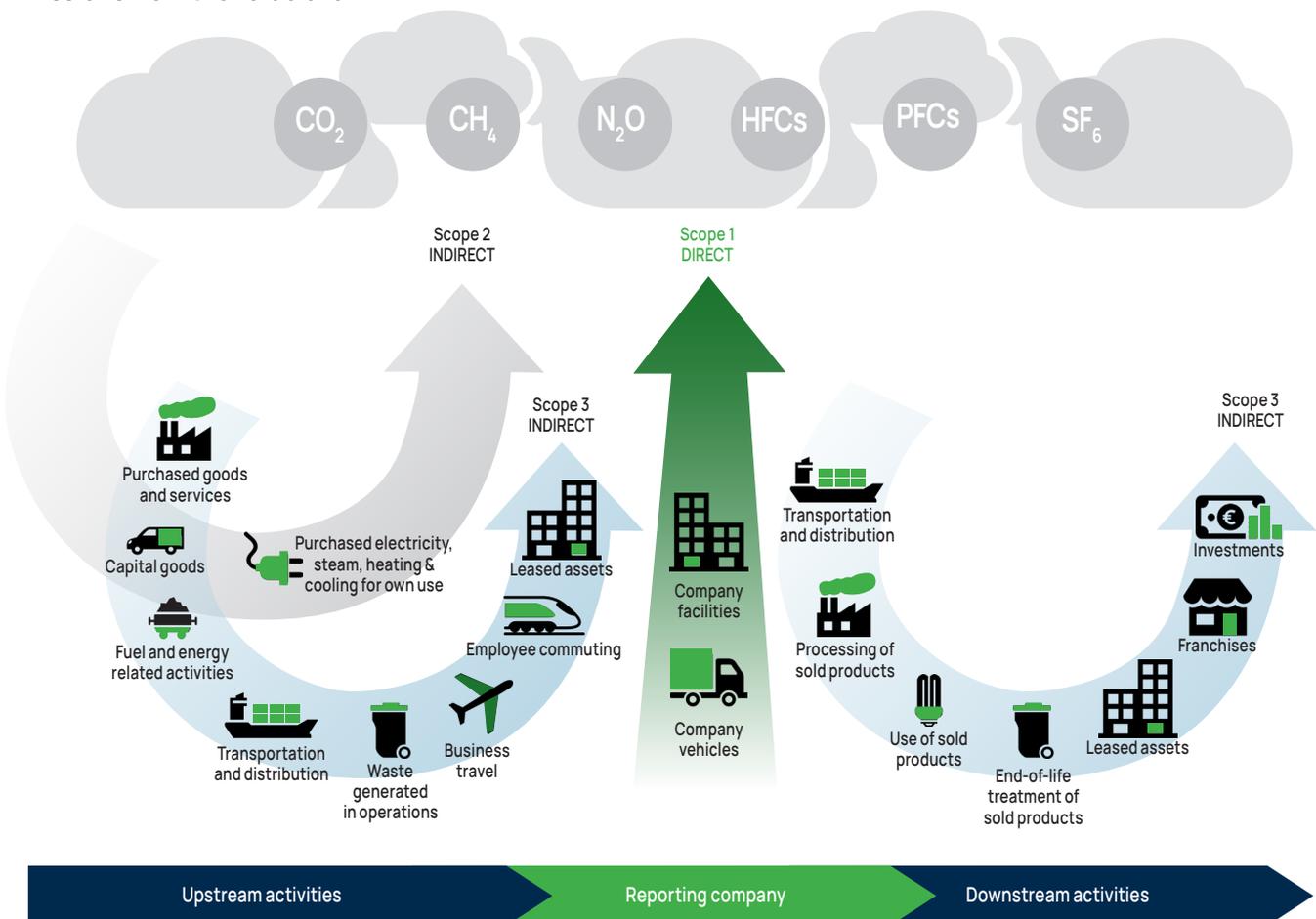
Implementation of sustainable actions requires that existing and new products and services must be rethought: How can products be produced with fewer raw materials and emissions? How can production be made more efficient? How can waste and rejects be avoided? How can raw materials be recovered and reused? How can existing products last longer, through repairs or reuse? Where can bio-materials be used? Such design principles for products and services are summarized under the term "eco-design." R&D departments must be given strict protocols to prioritize these values.

## 4. Sustainable supply chain

For most companies, the majority of emissions are indirect, arising from upstream in the value chain or at the end user. All links in the supply chain must cooperate and align to reduce the footprint of their own products. Zühlke is currently developing standards and IT solutions to map supply chains and all the players involved. This enables the recording of related emissions as well as measures to reduce them.

In the future, companies will play two roles here: On the one hand, they will demand more transparency and commitment to sustainability from their suppliers in order to achieve their goals. On the other hand, they will also be asked by downstream companies to provide sustainability information and to contribute to reducing emissions.

### Emissions from the value chain



Source: GHG Protocol/Science Based Targets Initiative

## 5. Sustainable business models and circular economy

Successful companies are characterized by the fact that they create a unique benefit for their customers and at the same time generate profitable sales.

How this is done in concrete terms can be described holistically as a business model with four dimensions:

**WHO:** Which customers and which needs are addressed?

**WHAT:** What products and services are offered to customers and what benefits do they provide?

**HOW:** What does the value chain look like, what key partners and which technologies are used?

**VALUE:** Why is the business profitable; what generates revenue and what are the revenue mechanics that enable profitable growth?

New sustainable business models challenge the traditional logic of producing and selling products and offer new, more sustainable customer benefits through alternative usage and payment models. For some product types, this may mean that devices are no longer sold but provided on a subscription basis or billed according to use.

The most far-reaching approaches are circular economy or Cradle-2-Cradle. Here, the goal is to avoid emissions and waste as much as possible and to keep materials in the loop. This requires cross-company cooperation in the value chain as well as cooperation with new partners, such as recyclers, operators of take-back systems, packaging manufacturers, and so on.

## 6. Organization, communication & culture

Sustainable transformation requires a change process as company values will be redefined. Sustainability must be organized in order to implement clear responsibilities (organizational structure) and to change business processes where needed (process organization). In addition, there are cultural and communication issues: how can the—usually high—interest of the workforce in the topic be used for the company? How can the change be communicated credibly both internally and externally? What initiatives can come from the workforce?

When communicating, care must be taken to ensure that it is credible and authentic and that “greenwashing” is avoided, as in the age of social media this can quickly have very negative consequences. The rule here is: It is better to do more than you report than the other way around.

The transformation to a sustainable company is an interdisciplinary task. It is important to involve people from different areas of the company and to proceed step by step so as not to overburden the organization. Following the Six Steps to Sustainability as outlined above is a roadmap to help build up necessary knowledge, tackle initial projects that deliver concrete results, and identify areas for improvement that are relatively easy to implement. The results will speak for themselves. ■



## Concrete goals for a successful transition to a circular economy include:

- Close the material loop: Closing the loop is an essential first step on the path from a linear value chain to circular value creation. The loop can be closed either by direct reuse of products or components, by remanufacturing, by traditional recycling, or by biodegradability of materials. The prerequisite is innovative product design: modularity, reversible joining techniques, and the avoidance of mixed materials for simplified disassembly and recycling of the product at the end of its use.
- Improve sustainability in the cycle: Improving the sustainability of the loop through innovation ensures that the loop supply contributes to solving environmental problems by reducing the resources used or by using the products in the loop longer and more intensively. This includes repairability, local production, and the use of renewable energy.
- Select a suitable revenue model: In addition to the one-time sale of a product, other revenue models are available that keep products in circulation, increase customer appeal and offer profitability, from paying for use via a subscription fee, to paying for the product's performance, to cash-back systems that reward a return of equipment that is no longer used. Ultimately the markets will determine which revenue model is accepted.
- Inspire customers through added value from circularity.



For more information on sustainability and innovation, contact senior advisor for ESG Bettina Gereth: [bgereth@clairfield.com](mailto:bgereth@clairfield.com).