

sustainability reporting for better business decisions



To achieve your company's sustainability and compliance goals, you need to control the complex and dynamic factors that impact them. iPoint provides the transparency you need to simplify compliance, sustainability and risk management. This requires taking 4 steps: **collect** the relevant data, **analyze** the relations and impacts in order to **report** the right information to the relevant stakeholders, and **evolve** the company towards your goals by minimizing risks and enabling collaboration and continuous improvement.

The CARE principle is the core of the iPoint Suite.

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By applying CARE, companies can, among other things, identify substances of concern or their product's carbon footprint, qualify and approve suppliers, and thus take control of their environmental, social and economic impacts. iPoint supports you on the path to product compliance and decarbonization all the way.







1. Why report compliance information?

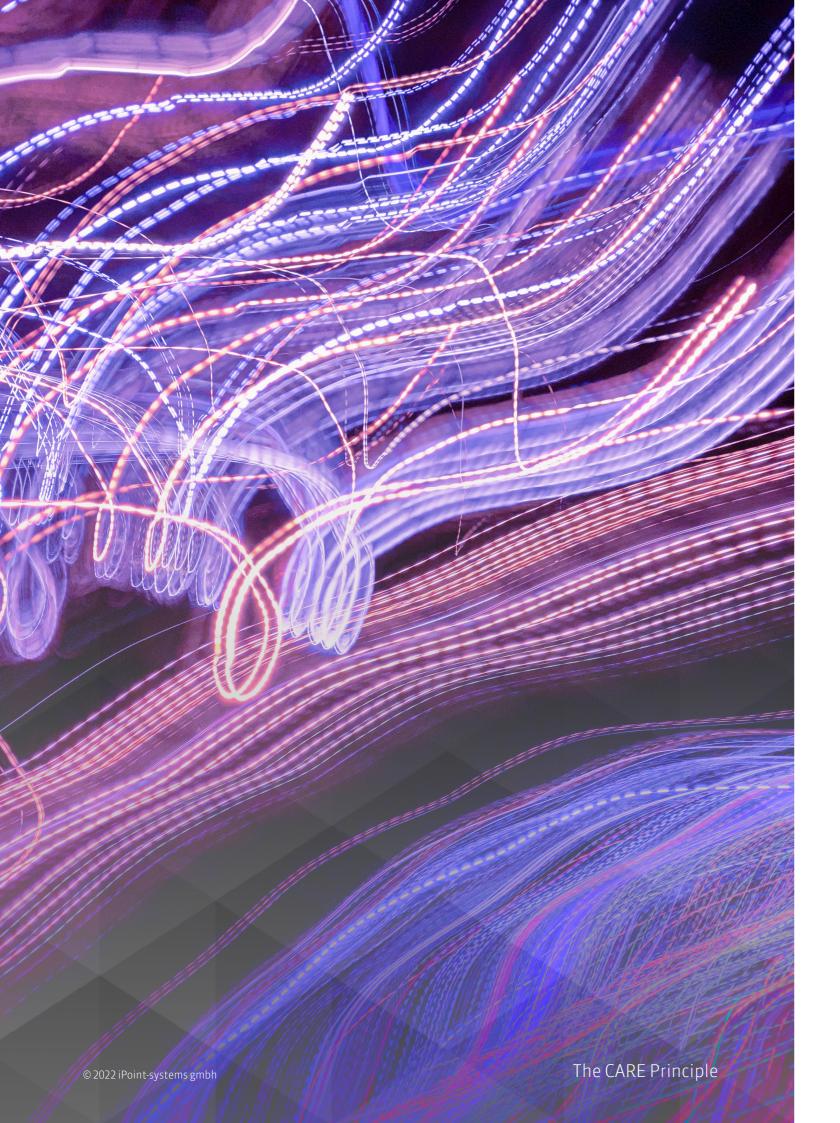
Compliance reporting is a must to **meet regulatory, customer, investor, and/or internal requirements.** Different regulations and standards define the different scopes, structures, and processes of various compliance reporting duties a company may have to fulfill, e.g., company-wide ESG/CSR, EHS, or product-specific material compliance reporting.

In terms of **product or material compliance**, the industry has the responsibility to manage the risks posed by chemicals, to declare specified uses of regulated substances, and to provide safety information on the substances they use in products as well as for production. Stakeholders such as consumers, investors, Non-Governmental Organizations (NGOs), and

government agencies are demanding to know what's inside the products companies produce and place on the market.

The stakeholder's goal is to create and ensure a "hazard free environment". Therefore, consumers have the right to demand that companies disclose the chemical composition of their products. NGOs, on the other hand, have also been pushing the envelope to include more potentially hazardous and high-risk substances in future restriction lists. Companies have to meet more and more regulations, which are increasing not only in number but also in complexity. Therefore, it is necessary to always be up to date or even better to be one step ahead.

The CARE Principle collect analyze report evolve









Increasing global regulations and requirements.

1. Why report sustainability information?

While product compliance reporting has been mandatory for decades, **reporting on product sustainability** was voluntary for a long time and often motivated by reputational reasons. However, due to greenwashing, shifting consumer focus, and investors looking for green investments, the demand for **proof of a product's sustainability** is increasing.

One method to provide reliable sustainability information in terms of environmental performance are **corporate and product carbon footprints.** The Product Carbon Footprint (PCF) is the best-known method to determine the climate impact of a product. Greenhouse gases are emitted during the entire life cycle of a product. The PCF helps to identify and analyze

them to effectively reduce or avoid greenhouse gas emissions as a next step. Similarly, the Corporate Carbon Footprint (CCF) focuses on the climate impact of the entire company.

In case a company wants to declare environmental impacts beyond climate-related factors it can conduct a **Life Cycle Assessment (LCA)** taking into account further environmental impacts like freshwater consumption, land use, fossil fuel depletion, etc. In some industries, environmental declarations are already a mandatory customer requirement, e.g., the **Environmental Product Declaration (EPD)**, which is a highly standardized LCA methodology for the building and construction industry and its suppliers.









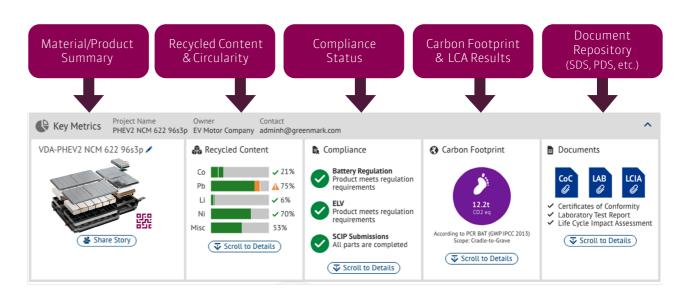




1. Why report sustainability information?

To achieve the sustainability goals set by the **EU Green Deal** companies have to prepare for regulatory requirements such as the EU Taxonomy, the Carbon Border Adjustment Mechanism or the Corporate Sustainability Reporting Directive. Looking at this development it becomes obvious that also product sustainability reporting will become mandatory in the future, just like product compliance reporting. Both, compliance and sustainability reporting requirements, are coming together in the emerging requirements for Digital Product Passports (DPP), which are part of the EU's **Circular Economy Action Plan** and are therefore being strongly driven by government and regulatory authorities.

Digital Product Passports are intended to serve as an enabler for sustainable and circular designs by digitalizing product life cycles. They will contain information on a product's composition, recycling and circularity potential, compliance status and environmental impacts such as carbon emissions. Details of the Digital Product Passports are currently discussed and developed by authorities as well as various initiatives bringing together industry stakeholders and experts in this field. You can read more on this in the "Combining compliance and sustainability reporting" chapter.



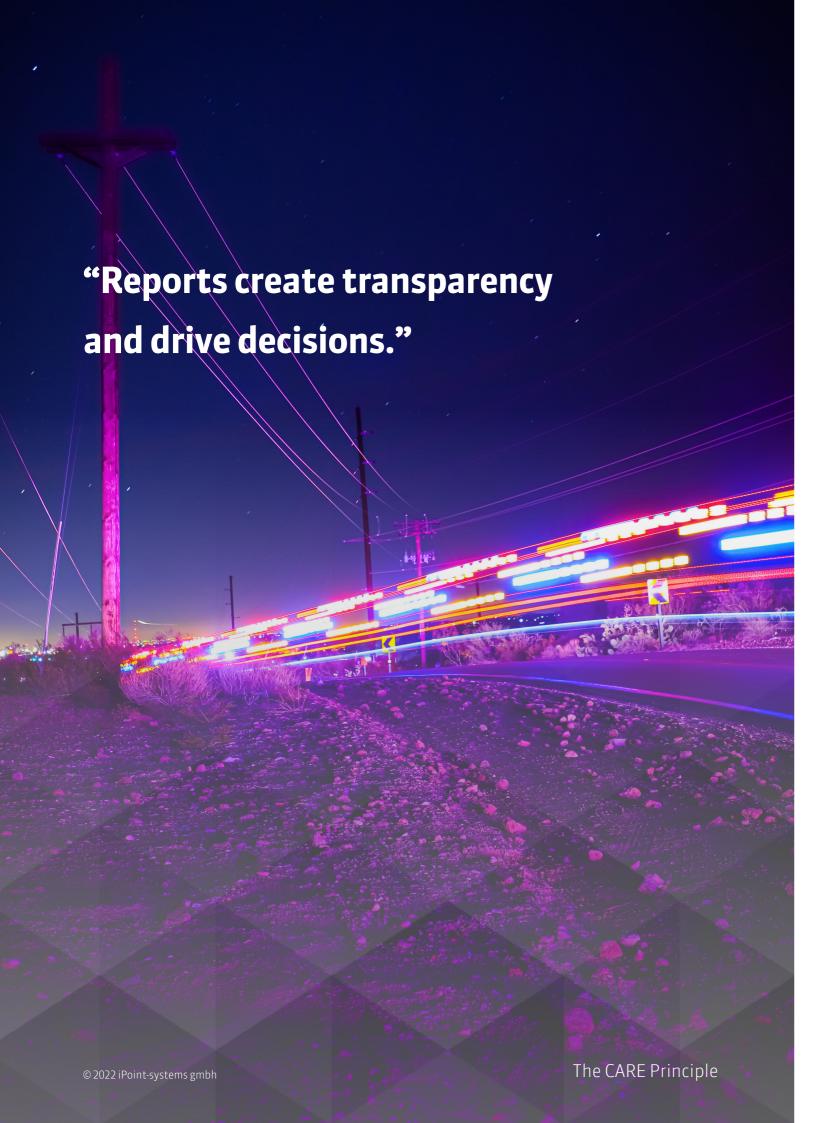
Digital Product Passports enable sustainable and circular designs.















2. Reporting for decision-making

Moreover, compliance and sustainability reporting enhance **internal decision-making** to create competitive and sustainable products. This is an important point as **reports create transparency and drive decisions**.

To identify risks and make decisions based on facts and figures instead of gut feelings, relevant reporting based on real-time data is required. For example, anticipating which supplier parts deliver the greatest risk for product compliance or identifying the CO₂ hot spots of a product. Knowing a product's components down to the substance level is especially important when a substance suddenly has to be substituted. A lot of companies are faced with the upcoming regulation for "per- and polyfluoroalkyl substances" (PFAS). Since this is a very large group of many thousands of substances, which have many different applications, from water-repellent finishings to process chemicals, it affects a wide variety of industries – e.g., apparel, packaging, and the manufacturing sector. As it is also used for car interior trim, it will become an requirement for Original Equipment Manufacturer (OEM) to substitute these substances in the automotive industry.

To create competitive and future-proof products, **carbon transparency** will be a topic to prepare for, especially in the consumer goods and electronics industry as there will be more data and information publicly available on the climate impact of products. This will make it easier for consumers to compare them and make a purchase decision or for investors to decide on green investments. Many companies have already set themselves net-zero targets, for the achievement of which it is necessary to know the carbon footprint of each individual product and where the greatest leverage for reduction lies. Sharing environmental performance reports in the right manner within the company helps to make the right decisions already in the design phase of a product both in the economic and ecological sense (design for **environment**). Such integrated reporting can, therefore, support product design recommendations and help to reach management KPIs.







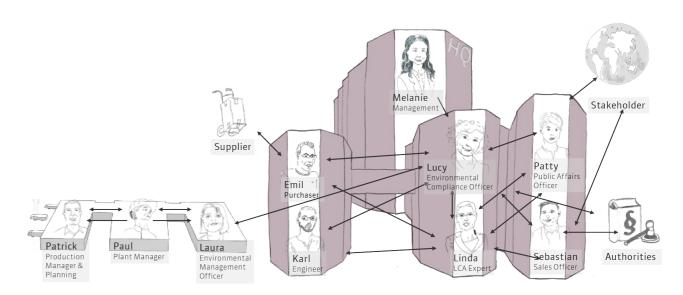




3. Challenges of reporting

The challenge of serving multiple purposes at multiple levels already described for the cases of data collection and analysis also applies to reports. From a large amount and variety of data, numerous stakeholders with different interests expect transparent information. Therefore, the main challenge is to **report what matters, when it matters, in the right manner.**

First of all, reporting obligations have to be fulfilled. Here again, multiple stakeholders (internal or external) are involved such as authorities (different government agencies in different countries), third-party auditors (like TÜV, DEKRA, etc.), customers and consumers, but also companies' internal auditors or e.g., purchasing departments.



A multitude of internal and external stakeholders require contextual data.

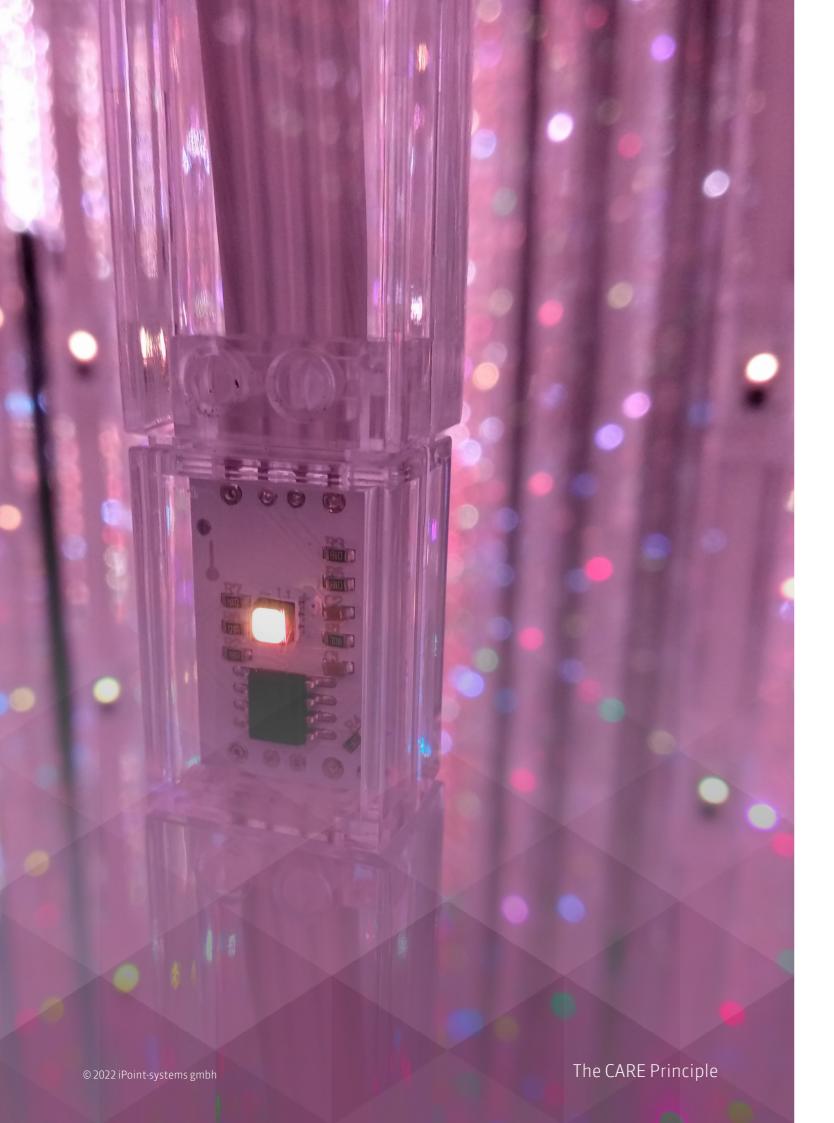
There are numerous reporting and certification requirements from different government agencies that **require specific data formats and structures to be followed**, including among others RoHS Certificates (e.g., in EU, China),

Waste Framework Directive SCIP Reporting (in EU), RRR Type Approval Certificates (in EU), China Quality Certification (in China), REACH Article 33 reporting, and the Conflict Mineral Filing (in EU, US).













3. Challenges of reporting

This **lack of overarching standardization** also applies to sustainability reporting considering the variety of reporting norms and standards provided by organizations and initiatives such as the International Organization for Standardization (ISO), Global Reporting Initiative (GRI) or IPCC (Intergovernmental Panel on Climate Change). Even with a standardized methodology, the comparability of results may still be limited because there is still some flexibility, e.g., concerning the system boundaries of an LCA.

There are several attempts to align this, for example, with the emerging concept of the **Product Environmental Footprint** (PEF), which is the EU Commission's response to the demand for standardization and comparability of the environmental performance of products. In addition, various industry initiatives developed, such as "Together for Sustainability" (TfS), which focuses on standards in the chemical industry, or the "Catena-X" initiative, which is supported by the automotive industry. Despite all efforts, however, different requirements cannot be completely avoided, as each country or industry often has its own requirements.

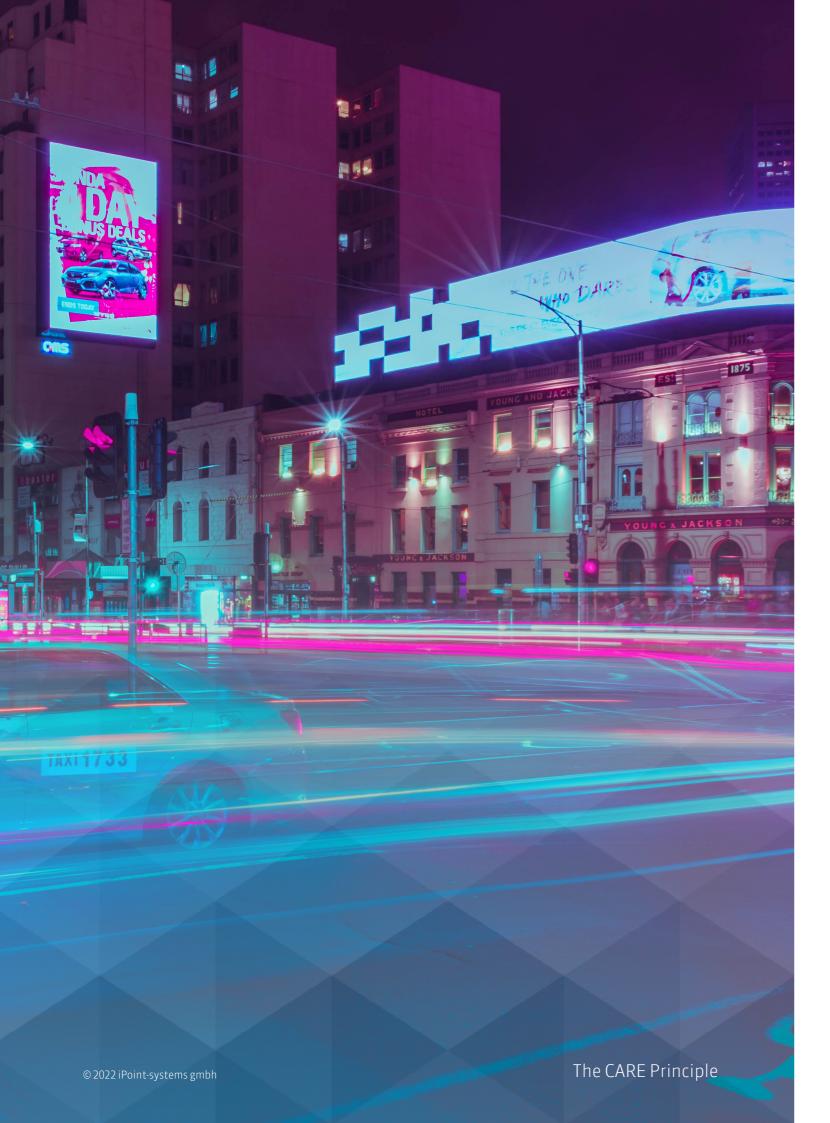
In addition to external requirements and stakeholders, the data basis from which relevant reports are derived is another major challenge. **Robust data is fundamental** due to the degree of variety and complexity of reporting requirements. The availability of reliable material and product data varies greatly between different industries. For example, the automotive industry has already collected a large set of solid data thanks to more than 20 years of efforts in the International Material Data System (IMDS). IMDS is a global data repository that contains information on the materials used by the automotive industry and, thus, provides a profound data basis. Other industries usually do not have access to such a well-maintained, long-existing data basis and must develop it first.

Moreover, **time limitations** add to the challenges. Some regulations require companies to provide the data to consumers within a limited timeframe (e.g., 45 days under EU REACH Article 33.2). In a dynamic market environment, ad hoc reports are also becoming increasingly important for internal decision-making processes. Potential risks must be identified quickly, and fast decisions need to be derived from real-time reports.

Finally, the **dynamics of requirements and markets** require to be always up to date. In a
globalized world, **new market entries** lead to
different regulations and reporting requirements, which have to be dealt with. Existing
regulations are continuously changing as well,
and new concepts are arising such as the Digital Product Passport.











4. Combining compliance and sustainability reporting

Material and **product compliance reporting** including REACH SVHC, SCIP, RoHS and Conflict Minerals reporting, has developed over a long period of time and is state of the art today. We are currently observing that compliance and sustainability reporting are growing closer and closer together.

This can be seen, for example, in the **EU Battery Regulation** which is intended to be the first pilot project of the Digital Product Passport. It is the first of its kind bringing together previously separate compliance and sustainability requirements.

The automotive industry, electric vehicle producers in particular, will have a pioneering role in this regard. They are required to deliver

PCFs and LCAs for industrial and electric vehicle batteries above a certain capacity along with product compliance information and further basic characteristics of the battery.

The regulation specifically states that this information must be provided in an individual "electronic record" that shall be accessible online, i.e. a **battery passport**. To enable this, the IMDS Terms of Use have changed just recently. Since September 2022 IMDS data can be used to cover "Environmental Legislation", which means Corporate Social Responsibilities, sustainability assessments including LCA and carbon footprint data, and improvement of Research and Development for quality and engineering processes.

"Sustainability reporting will be part of the product compliance process."











4. Combining compliance and sustainability reporting

This is a very concrete step towards Digital Product Passports in general and lays the foundation for circular economy, battery passports and various upcoming regulations for other industries. Regardless of what the Digital Product Passport will look like in detail, specific product sustainability information like Product Carbon Footprints and environmental assessments such as Life Cycle Assessments will be included in the passports, no matter in which form.

This in turn also affects the industries at the beginning of the supply chain. If OEMs and the manufacturing industry have to provide carbon footprints for their products, the entire supply chain must be taken into account. This means that PCFs must be provided at the very beginning of the supply chain, which will also

affect the **chemical industry**, for example. Many chemical companies are facing increasingly ambitious customer requirements in this regard and prepare to report carbon footprints. For example, BASF strives to calculate individual carbon footprints of all its products and developed its own **PCF methodology**, to determine product carbon footprints taking into account the specific framework conditions of the process industry. iPoint is proud to include this approach in our own Product Sustainability solution.

These developments show that companies should engage with these requirements and sustainability reporting now, as this will be part of the product compliance process in the future.

"The demand for Product Carbon Footprints will trickle down to the beginning of the supply chain."







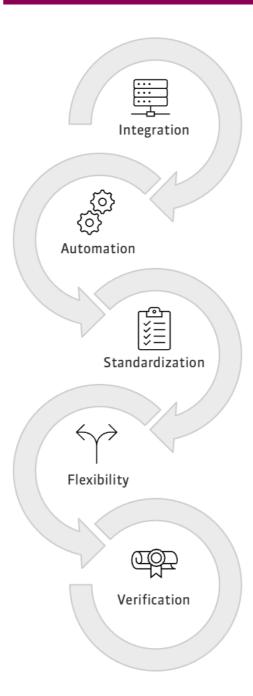








5. Key Capabilities



To meet the challenges mentioned above, a toolkit is needed that combines both compliance and sustainability perspectives in reporting. Therefore, a solution not only has to cover both perspectives but ideally uses the same data pool and standardized processes to derive reports for different purposes.

An essential prerequisite is an **integration** into different systems to efficiently (re)use existing data, for example, by leveraging IMDS data to create product sustainability reports in the automobile industry. An integrated solution also enables the use of data sources such as Bills of Materials (BOM), production orders or ERP system data to create reports without minimal manual effort. To be able to generate diverse reports for different stakeholders in a fast and flexible fashion it is important to have sovereignty over one's own data, in the collection, analysis, and reporting.

Moreover, reporting directly into regulatory or customer portals reduces time-consuming manual effort, e.g., by doing bulk reporting to the SCIP database. Or exporting LCA and carbon footprint results directly to PDM/PLM systems with help of purpose-built APIs. The same will apply to Digital Product Passports once their requirements and formats have been specified.

Automation supports accurate ad hoc and real-time reporting capabilities and helps to meet global compliance requirements through accurate, timely reports.















5. Key Capabilities

Thanks to intelligent automation, data analysis can flow directly into reporting without high manual effort, e.g., by sending an updated SCIP report to the European Chemicals Agency (ECHA), immediately after a recent update of the Candidate List or by creating live PCFs or LCAs with real-time data for a whole product family. This helps companies to save time and money.

Due to the challenge of lacking **standardiza- tion** of regulations and norms, it is all the more important to have a data pool that includes all data and then allows the relevant information per stakeholder to be extracted in the required form. This also makes it possible to react quickly and flexibly to new requirements.

A solution offering standardized processes leads to higher reliability, resilience and certifiability for both product compliance and sustainability reports. May it be to prepare and send standard RoHS, REACH letters or create and send full material declarations to customers using standard formats. It is also necessary to report PCF and LCA results in a standardized and thus verifiable way and facilitate the comparability of results.

Flexibility in report creation is a precondition to meet the variety of requirements and stakeholder interests. It enables the customization of the report structure based on different levels such as department, part or BOM level. Reporting at any BOM level with integrated supplier data in multiple formats offers a high

degree of flexibility. A key capability is also to export results to Microsoft Excel or POWER BI to flexibly create individual reports and charts to use them for exchangeable documents, etc. This ensures that companies can react to market or regulation changes by simply reusing existing declarations.

To transport report results in the right manner **visualization** is key. Be it for regulatory reasons, e.g., to display conflict minerals status grouped by supplier status from general to critical or to show environmental hotspots. Role-specific internal reporting encourages informed decision-making by visualizing exactly those results that are relevant to the stakeholder or department in question. For example, a Carbon Footprint can be provided at a detailed level to product designers as a decision support tool for green product design and in the form of an aggregated high-level report for management KPIs.

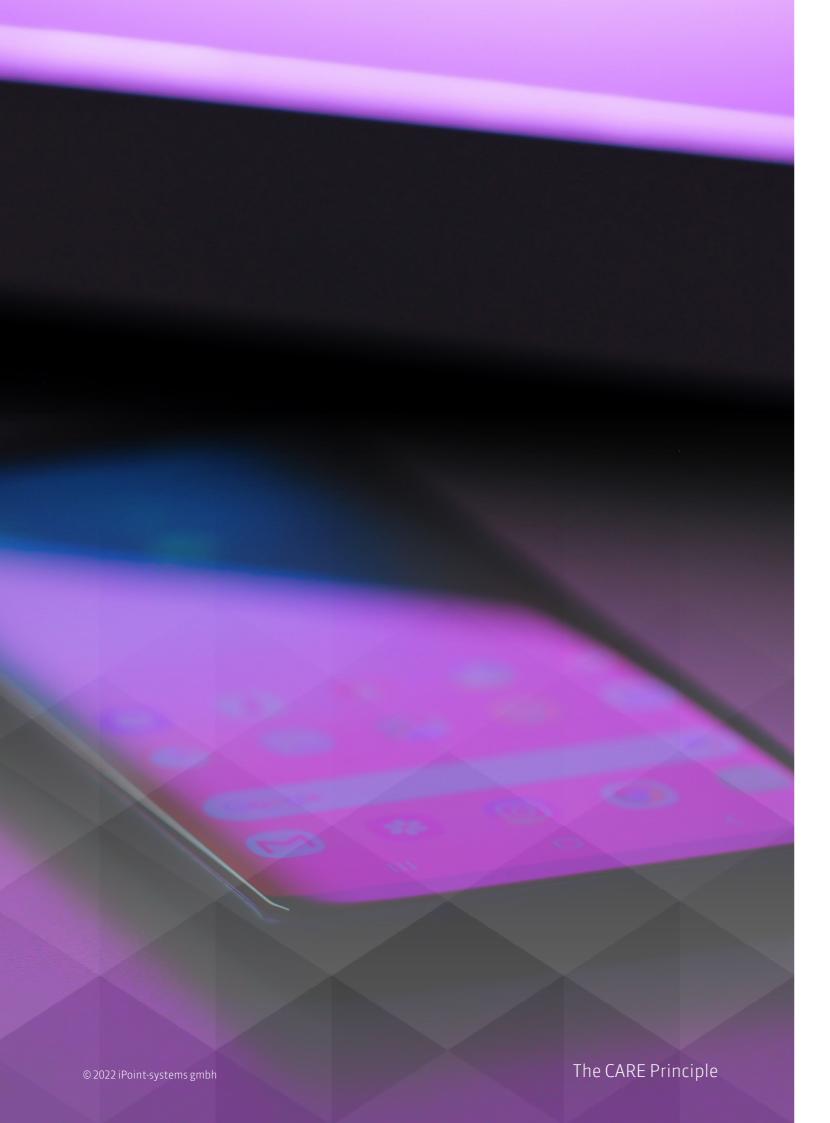
Verification is the final goal behind every product compliance report and sustainability report that is presented to the public. Especially external B2C product sustainability reporting requires thorough third-party verification and is time-consuming.

In this regard, iPoint uses meta-models for LCAs, which allow to calculate results for a whole product family in one LCA model. This allows our customers to save time and costs, e.g., as the central meta-model can be reviewed instead of each product model individually.













6. The iPoint Suite



Suite

The iPoint Suite not only ensures faster global market access for your safe and compliant products but also enables better positioning through sustainable products, as product sustainability sooner or later will be part of the compliance

process. By standardizing and automating processes and creating transparency, the iPoint Suite enables procurement, engineering, and design teams to make better business decisions and increase environmental performance and speed up innovation cycles. It provides long-term strategic support, for instance in creating carbon transparency and setting carbon reduction goals to prepare for Digital Product Passports. The iPoint Suite reveals opportunities to save cost, energy, time, and effort while minimizing ecological, social, and economic risks by delayed market access, penalties and

recalls. With the further advantage that you have sovereignty over your own data.

Through good groundwork in collecting and analyzing data, the iPoint Suite helps to build **relevant reports** satisfying the variety and complexity of requirements and stakeholder interests. It also helps to **simplify reporting** and verification processes through automated and **standardized processes**. The iPoint Suite combines both the product compliance and product sustainability perspective. Therefore, it is the best preparation for the future integration of product sustainability information into compliance processes. It enables preparing for regulations such as the Digital Product Passport or EU Battery Regulation and helps companies to evolve by making better business decisions to create competitive and sustainable products.



The iPoint Suite enables the Digital Product Passport.









