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## Toolkit Zone 3 Practical Modules

# Digital Tools for Green Business

Green and Circular Economy in Business by  
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## Chapter 16 - Digital Tools for Green Business

Digital tools can make sustainability management easier for SMEs because they reduce manual work, improve data quality, and turn scattered information into decisions. They help answer three recurring questions that SMEs face from customers, financiers, and public buyers: What are your impacts, how do you measure them, and how do you improve them over time.

A good way to think about digitalisation in sustainability is not as buying one “ESG platform”, but as building a light data backbone that connects day to day operations (energy, materials, transport, suppliers) to a small set of key indicators that the business can actually use.

### 16.1 Building a light sustainability data backbone

Most SMEs already hold relevant sustainability data, but it sits in different places: invoices, utility bills, spreadsheets, ERP systems, maintenance logs, and supplier documents. The first step is to define a minimal data backbone with three layers:

- a. Activity data (what happens). Examples: electricity and fuel consumption, tonnes of materials purchased, kilometres travelled, packaging volumes, water use, waste streams, and key supplier inputs.
- b. Methods and factors (how you convert activity into indicators). Examples: agreed emission factors, calculation rules, and assumptions for turning energy and logistics into greenhouse gas and resource indicators.
- c. Outputs (what you report and manage. Examples: a small KPI set for management, plus a format that can feed customer questionnaires, tenders, or voluntary reporting.

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For SMEs, this backbone should remain proportional. The goal is to standardise a few high impact data flows and reuse them many times, instead of repeatedly answering similar questions in different formats.

### 16.2 Practical measurement tools SMEs can use now

#### Greenhouse gas accounting at SME scale

Many SMEs start with organisational greenhouse gas accounting because it is the most requested metric and often overlaps with efficiency opportunities. A widely used non prescriptive approach is to align calculations with an established standard for organisational greenhouse gas quantification and reporting, such as ISO 14064 1

(International Organization for Standardization, 2018). This supports consistency, transparency, and auditability without requiring complex systems from day one.

In practice, SMEs can digitise greenhouse gas accounting through:

- Structured spreadsheets and templates (sufficient for early stages if they are consistent and documented)
- Simple carbon accounting applications that import energy bills and fuel use
- ERP extensions that link purchasing and logistics data to emissions estimates

The most important choice is not the software brand, but the discipline of storing sources, assumptions, and calculation logic so results can be explained, updated, and improved.

Energy monitoring and energy management

Energy is often the fastest place to see benefits because the same data supports cost control and emission reduction. SMEs can combine:

- Smart meters or submetering for major energy users
- Simple dashboards that track monthly consumption and intensity (for example per unit output)
- Alerts for unusual spikes that signal leaks, faulty equipment, or operational drift

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Where SMEs want a more structured approach, ISO 50001 provides a management system framework for continuous improvement in energy performance. Many SMEs adopt its logic without formal certification by focusing on energy review, performance indicators, and action plans.

### *Materials and life cycle thinking*

For products, packaging, and key materials, SMEs increasingly need life cycle oriented information. At minimum, this means tracking material types, recycled content, and end of life pathways. For more advanced work, SMEs can use simplified life cycle assessment approaches, and where capacity allows, align with EU methods such as the Product Environmental Footprint and Organisation Environmental Footprint guidance, which were developed to improve comparability and credibility of environmental claims and data (European Commission, 2021).

A widely used entry level LCA software option is openLCA, which supports structured modelling while still being accessible for smaller teams (GreenDelta, n.d.). SMEs do not

need full LCA coverage for all products immediately. A realistic start is to assess one flagship product line or the highest volume packaging formats.

### **16.3 Supply chain data, traceability, and product information**

Digital tools become particularly valuable in supply chains because SMEs are asked to provide evidence, not only statements. Three practical data domains matter most:

#### *Supplier information and documentation*

Track supplier certifications, policies, declarations of conformity, and key sustainability attributes in one place. Even a simple shared folder structure and spreadsheet index can reduce the time spent responding to repeated requests.

#### *Traceability and origin data*

For high risk or high value inputs, basic traceability reduces operational and reputational risk. SMEs can start with batch level tracking for critical materials and gradually move toward richer digital documentation where required by customers or regulation.

#### *Product level sustainability information and Digital Product Passports*

EU policy is moving toward more structured product information flows. The Ecodesign for Sustainable Products Regulation creates a framework for Digital Product Passports to improve the availability of product sustainability information across value chains (Regulation (EU) 2024/1781, 2024). For SMEs, this matters even if they are not first in scope, because customers may request product attributes that are designed to be passport ready, such as material composition, repairability data, and compliance documentation.

A practical implication is that SMEs benefit from organising product data early: bills of materials, packaging specifications, safety datasheets, and durability or repair information. This reduces future friction when larger buyers standardise their data requests.

### **16.4 Digital reporting and right sized disclosure**

For SMEs, the aim is usually not to produce a large corporate report but to provide credible, reusable information. The emerging EU voluntary sustainability reporting standard for SMEs (often referred to as VSME) is designed to be proportionate and to reduce fragmentation of data requests by providing a common baseline that SMEs can

share with banks and business partners (EFRAG, 2024). If an SME adopts a VSME style structure internally, it often becomes easier to respond to customer portals, tender questions, and finance questionnaires using the same underlying dataset.

Digitally, this can be implemented through:

- A shared data room or structured folder for evidence
- A maintained KPI table that updates at a defined frequency
- Clear ownership of each indicator, including who updates it and where the source data sits

### 16.5 A curated toolbox for SMEs

The most useful way to curate digital tools is by function. SMEs can combine lightweight options across these categories:

- a. Data capture. Smart meters, utility portals, fuel card exports, telematics summaries, procurement extracts from accounting or ERP, and basic waste contractor reports.
- b. Data management. Spreadsheets with defined templates, simple database tools, or lightweight ESG data platforms. The critical feature is version control and traceability, not sophistication.
- c. Carbon and footprint calculation. Tools that convert energy, fuel, and logistics data into greenhouse gas indicators, ideally with documented factors and exportable calculation logs. ISO aligned approaches support consistency (International Organization for Standardization, 2018).
- d. Materials and LCA lite. Product bill of materials tracking, packaging calculators, and LCA tools such as openLCA for deeper modelling when needed (GreenDelta, n.d.).
- e. Supplier and product data. Supplier document libraries, questionnaires, and traceability tools. As Digital Product Passports develop, product attribute management becomes increasingly important (Regulation (EU) 2024/1781, 2024).
- f. Reporting outputs. A VSME structured dataset and a small set of management KPIs that can be reused across external requests (EFRAG, 2024).

### 16.6 Green IT: reducing the footprint of digital systems themselves

Digital tools help manage sustainability, but ICT also has an environmental footprint. SMEs can reduce this footprint without harming productivity by focusing on practical choices:

### *Efficient devices and longer lifetimes*

Extending device lifetime through repair, upgrades, and managed refresh cycles reduces embedded impacts. Procurement policies that prioritise durability and repairability support this.

### *Cloud and data centre impacts*

Many SMEs rely on cloud services. The main lever is choosing providers with credible energy efficiency and renewable energy strategies and avoiding unnecessary data storage and processing. At EU level, the European Code of Conduct on Data Centre Energy Efficiency provides guidance and best practices aimed at improving energy performance in data centres (European Commission Joint Research Centre, n.d.). Even if SMEs do not run data centres, this gives a benchmark for evaluating service providers.

### *Data minimisation and digital sobriety*

Unnecessary data retention, duplicate storage, and heavy default settings increase energy use. SMEs can adopt simple practices: defined retention periods, compressing and archiving, avoiding unnecessary video meetings, and limiting high resolution transfers when not needed.

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### *Monitoring ICT energy use*

For SMEs with server rooms, equipment, or high IT loads, monitoring electricity consumption of ICT equipment and cooling can reveal quick wins, especially around equipment consolidation, idle shutdown policies, and cooling optimisation.

It is also useful to keep an eye on broader trends. International energy analysis has highlighted the growing attention on data centres and digital infrastructure in electricity demand discussions, including Europe's ambitions and constraints around data centre growth (International Energy Agency, 2025).

## **16.7 What “good” looks like for an SME**

A strong digital approach for an SME is usually defined by a few characteristics:

- One consistent dataset, reused across many requests
- A limited KPI set linked to decisions and investments
- Clear documentation of sources and assumptions
- Proportionate traceability that matches customer and regulatory needs

- ICT practices that avoid waste and support efficiency

When these elements are in place, digital tools stop being an extra administrative layer and become part of normal management. That is the point where sustainability performance becomes easier to improve, easier to explain, and easier to finance.

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## References

European Commission. (2021). Commission Recommendation (EU) 2021/2279 of 15 December 2021 on the use of the Product Environmental Footprint and Organisation Environmental Footprint methods to measure and communicate the life cycle environmental performance of products and organisations. Official Journal of the European Union.

European Commission Joint Research Centre. (n.d.). European Code of Conduct for Data Centre Energy Efficiency. <https://e3p.jrc.ec.europa.eu/communities/data-centres-code-conduct>

EFrag. (2024). VSME: Voluntary sustainability reporting standard for non listed SMEs. <https://www.efrag.org/en/sme-standard>

GreenDelta. (n.d.). openLCA. <https://www.openlca.org/>

International Energy Agency. (2025, November 16). Overcoming energy constraints is key to delivering on Europe's data centre goals. <https://www.iea.org/commentaries/overcoming-energy-constraints-is-key-to-delivering-on-europe-s-data-centre-goals>

International Organization for Standardization. (2018). ISO 14064 1:2018 Greenhouse gases Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals. <https://www.iso.org/standard/66453.html>

Regulation (EU) 2024/1781 of the European Parliament and of the Council of 13 June 2024 establishing a framework for the setting of ecodesign requirements for sustainable products, amending Directive (EU) 2020/1828 and Regulation (EU) 2023/1542 and repealing Directive 2009/125/EC. (2024). Official Journal of the European Union. <https://eur-lex.europa.eu/eli/reg/2024/1781/oj>



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