

Interview Summary: Participant D

Professional Background

Participant D is a Utility Engineer specializing in HVAC and mechanical systems. Originally from France, has seven years of experience, including over five years at a large Engineering, Advisory, and Consulting Services in France within the Property and Building Business Unit. Since relocating to Stockholm, the participant has been working within the company's Sweden's Industrial Business Unit, focusing on decarbonization projects, energy consumption analysis, and thermal system optimization.

Understanding of Digital Product Passports (DPP)

The interviewee has a solid understanding of DPPs, describing them as documents that accompany a product with key information such as component materials, manufacturing origin, and carbon emissions. Also emphasizes their role in lifecycle assessments, data transparency, and reusability of components. Noted that France has already made DPP-like documentation mandatory for buildings, especially for carbon footprint calculations and regulatory compliance through the AGECL law.

Potential and Impact of DPP in Industry

DPPs are seen as a transformative development, particularly in construction and infrastructure. Believes that DPPs will expand beyond buildings to sectors like industrial manufacturing and environmental engineering. Stressed the growing need for standardized data to support lifecycle assessment and sustainability metrics, and anticipates that DPPs will soon become essential in all sectors.

Current Integration Practices and Data Tracking

The work is focused on collecting energy consumption and CO₂ data from client sites, often through Building Management Systems (BMS) or direct communication with clients. Product-specific information is generally requested from suppliers. A frequent challenge is identifying the right contact person or collecting missing data when not measured on-site.

Data Formats and Transformation

In France, participant D used software tools like "Climawin" and "Pléiades+Comfie" for thermal simulation and carbon analysis. These tools access public libraries containing standardized DPP documents, typically in PDF format, which are automatically parsed by the software. The interviewee is not familiar with the backend mechanisms of how these PDFs are read by the system.

Enterprise Asset Management Systems (EAM/CMMS Usage)

Does not use traditional EAM systems but works with BMS platforms to extract operational data from buildings. The company that participant D works for is globally beginning to implement a sustainability-focused software tool named Sweep for ESG reporting, which will require input on Scope 1, 2, and 3 emissions, including emissions from purchased goods and services.

Security and Data Sharing Concerns

Acknowledged potential confidentiality issues, especially in cases involving proprietary or custom-built equipment. For example, manufacturers may be hesitant to disclose full lifecycle or material data due to intellectual property concerns.

API and Future Integration Needs

While not directly involved in API use, the interviewee anticipates that standardized access to product data (like through QR codes or DPP registries) would benefit consultants by reducing manual work and improving access to verified data during site visits or audits.

Interoperability and Semantic Technologies

Participant D was unfamiliar with ontologies and Semantic Web technologies before the interview. After a brief explanation, the interviewee recognized their value in structuring and standardizing product data for reuse and machine readability. Suggested that Frances's implementations could offer insights into effective semantic structuring and data sharing practices.

Data Validation and Consistency

A key challenge with the work is dealing with unavailable or inconsistent data. If a supplier cannot provide specific data (e.g., electrical consumption), assumptions must be made and validated with the client. Emphasized the need for better data availability and centralization to support reliable assessments.

Customization and Standardization Challenges

The interviewee believes DPPs will help establish a universal format for product and sustainability data, especially helpful when working with diverse clients. A standardized structure across industries would reduce delays in locating contacts or interpreting varying document formats.

Use of QR Codes and Mobile Access

Supports the idea of scanning products (e.g., flow meters or HVAC units) on-site to directly access operational and sustainability data. This would streamline workflows, especially during audits or energy analysis. Suggested mobile phone access for field engineers and direct computer integration for reporting would be ideal.

Implementation Challenges

Initially, DPP adoption may be time-consuming due to new processes and training. However, believes long-term benefits outweigh the short-term burden, particularly in reducing data inconsistencies and time spent sourcing information manually.

Opportunities for Feedback Loops

DPPs could enable better lifecycle monitoring and traceability for industrial components. With product data accessible via scannable codes, it would be easier to report faults, track component usage, and assess repair or replacement frequency.

Outlook and Recommendations

Participant D strongly supports DPP adoption, especially in sustainability-focused roles. The interviewee highlighted:

- The value of CO₂ and energy data for regulatory compliance and lifecycle assessment.
- The usefulness of France's public DPP libraries as a reference model.
- The need for global tools like Sweep to unify emissions tracking across regions.
- The importance of integrating DPPs into both design (e.g., via BIM tools like Revit) and operational workflows.
- Recommends looking into cross-country practices and regulatory standards, as these could inform how to best implement and scale DPP solutions across borders and business units.