

Building data and energy renovation: What have we learned from existing digital building logbook (DBL) initiatives?

Sun-Ah HWANG

Department of Management in the Built Environment, TU Delft
Demo-BLog (Horizon Europe)

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ORGANIZED BY:



Socio-technical barriers



Financial barriers



Socio-technical barriers



Financial barriers



Socio-technical barriers




Financial barriers



Vlaanderen | WONINGPAS

AFMELDEN HULP NODIG

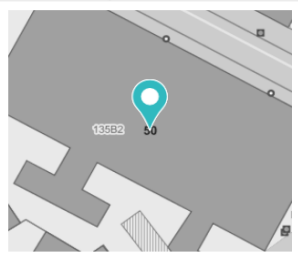


Energiestraat 38
ZOMERBEEK
[naar andere woning/perceel](#)

Mijn woningpas

- Gebouw, indeling, ligging
- Energie
- Isolatie & Beglazing
- Installaties
- Bodem
- Vergunningen
- Mobiscore
- Woningkwaliteit
- Water en riolering
- Renovatiewerken
- Omgeving
- Woningkwaliteitswijzer

Bekijk de gegevens van uw **ééngezinwoning**. Het gebouw is een **halfopen bebouwing** van bouwjaar 2016.
[Meer info over mijn gebouw](#)



Status

<p>Energie Vastgesteld in 2009 Niet goed Meer</p>	<p>Energieverbruik Gegevens gekend Meer</p>	<p>Bodem Gegevens gekend Meer</p>
<p>Mobiscore Uitstekend Meer</p>	<p>Zonnepotentieel Vastgesteld tussen 2013 en 2015 Ideaal Meer</p>	<p>Isolatie Vastgesteld in 2009 Deels gekend Meer</p>
<p>Installaties Vastgesteld in 2021 5 gekend Meer</p>	<p>Woningkwaliteit Technisch verslag 2019 Ongeschikt en onbewoonbaar Meer</p>	<p>Water en riolering Riolering aanwezig Meer</p>
<p>Vergunningen Meer</p>		

HULP NODIG?

EPC overview

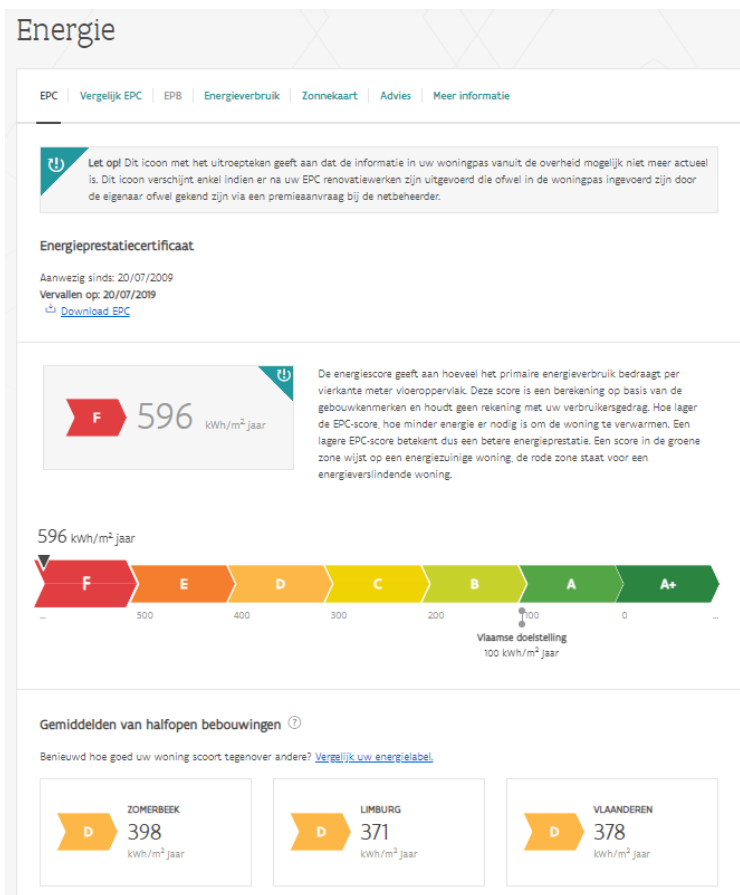
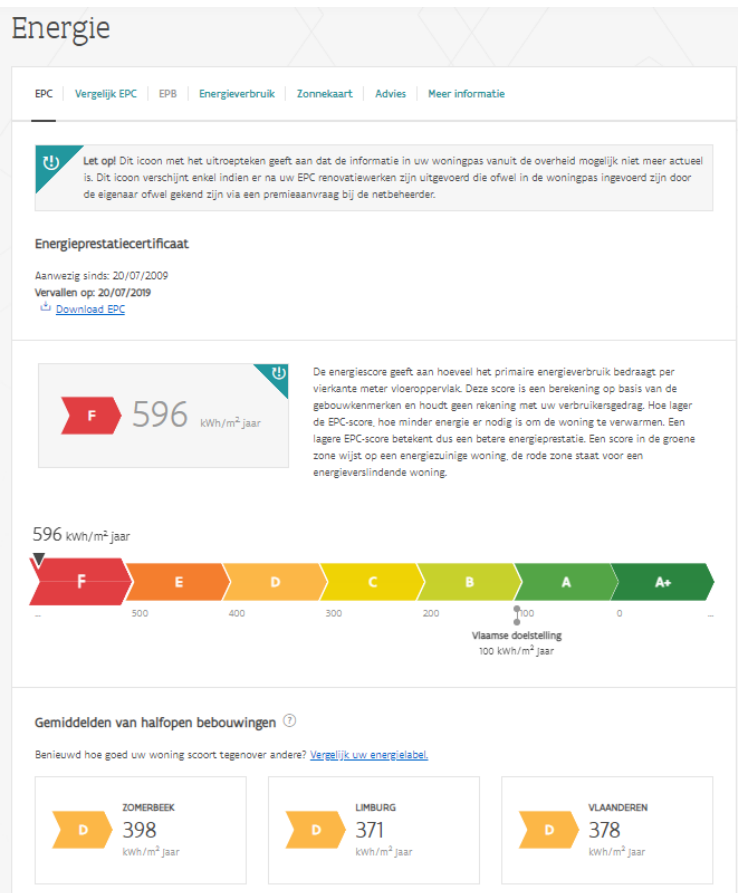
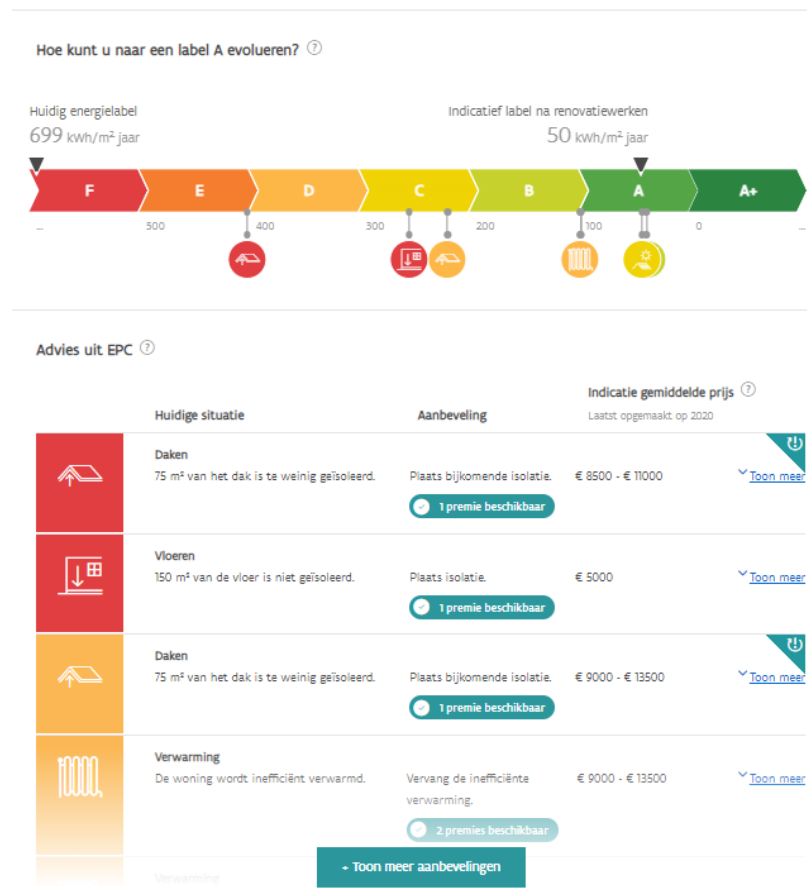


Image source(s): Woningpas (2023).

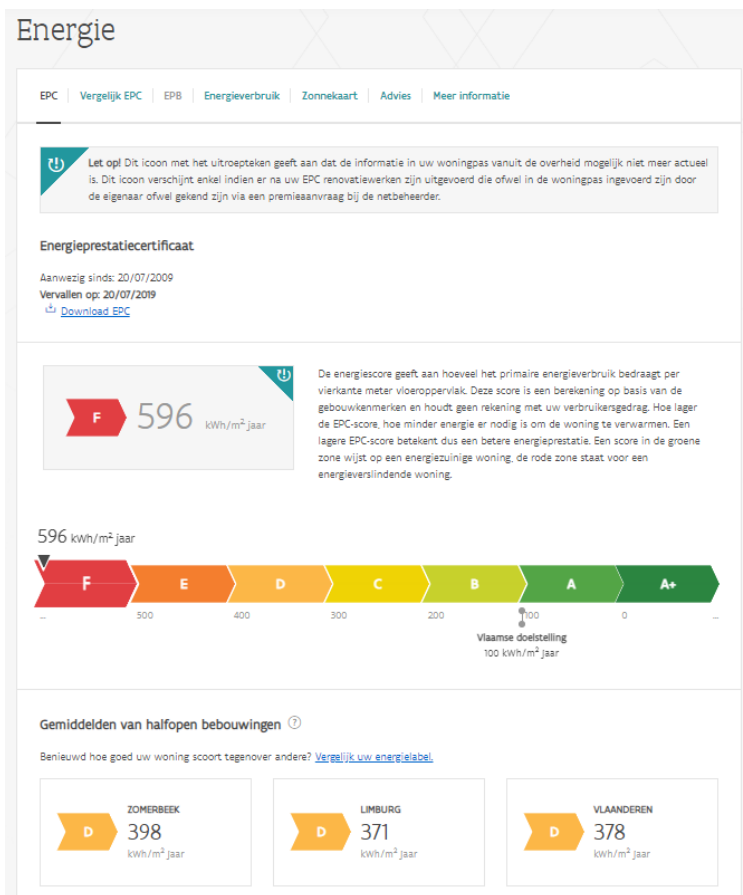
EPC overview



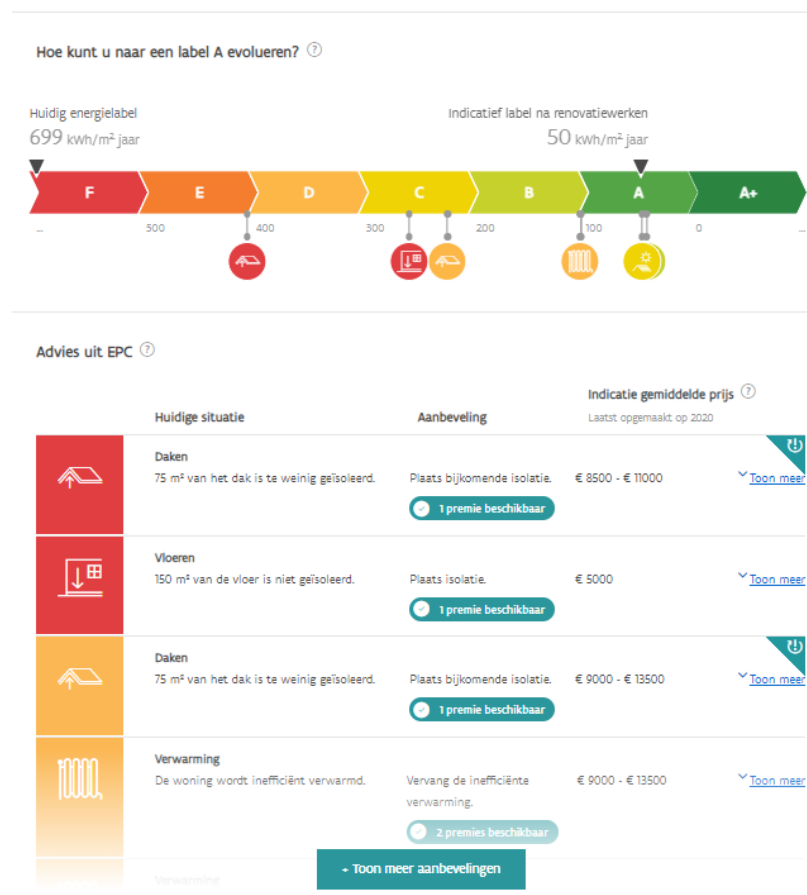
Renovation advice



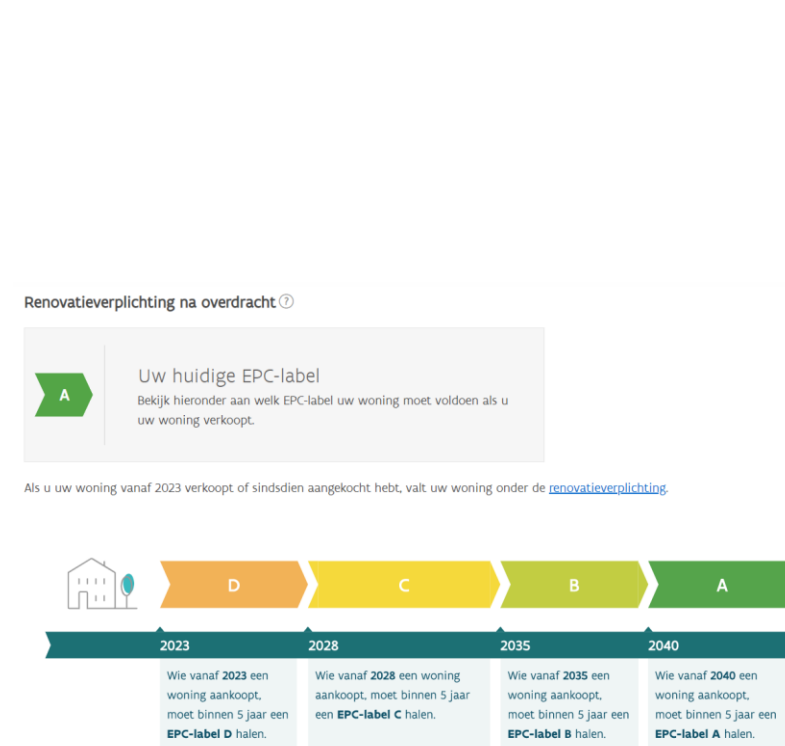
EPC overview



Renovation advice



Renovation obligations



What is a DBL?

A **digital building logbook (DBL)** is
“a **common repository** for all relevant
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transparency, trust, informed
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Why do we need a DBL?

The DBL is a key solution to bridge the gap between the **vast amount of data generated by various stakeholders across the building’s life cycle** and the **current lack of methodologies and tools** to systematically manage, organise, structure, and share this data.

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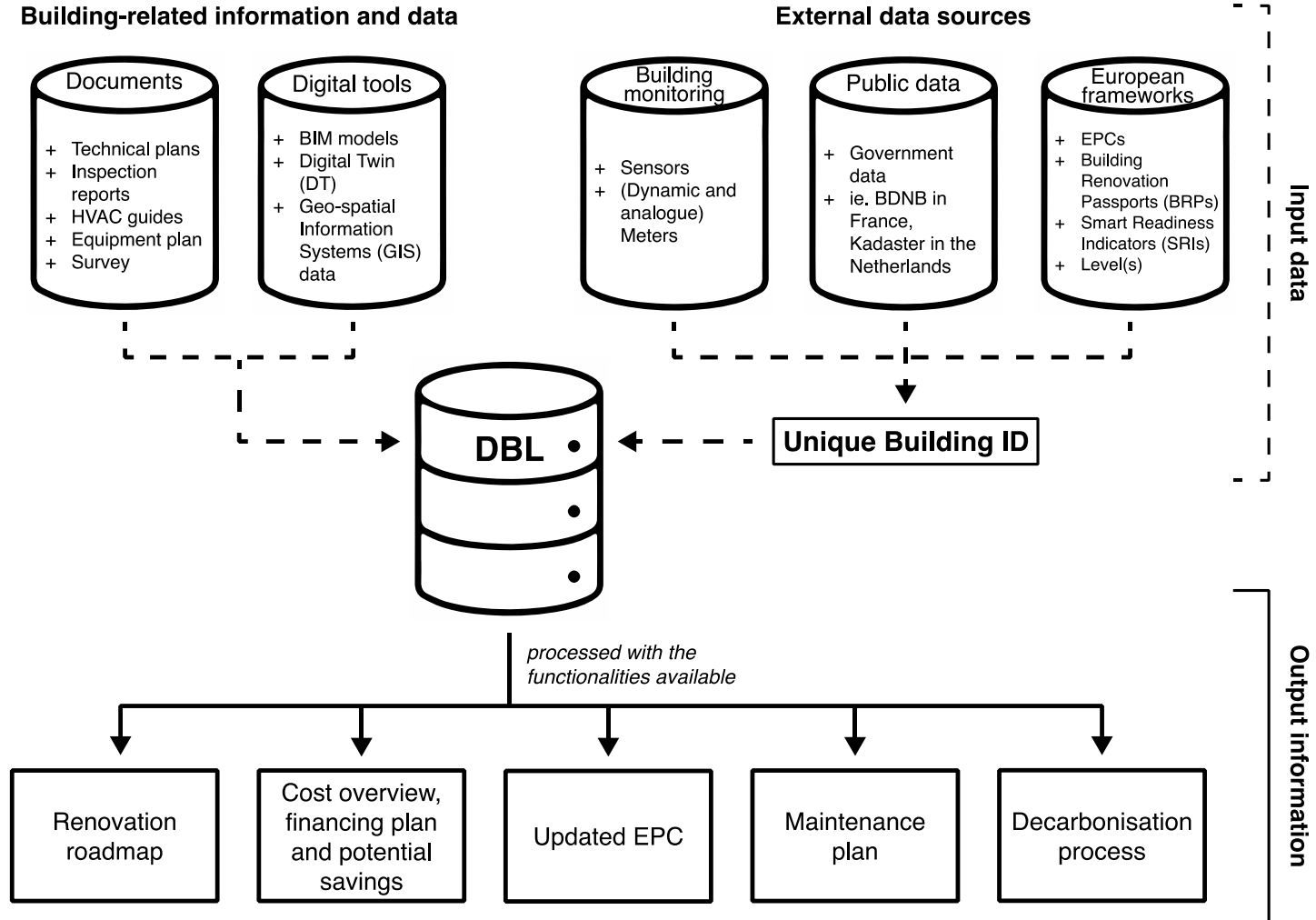
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What can be stored in a DBL?

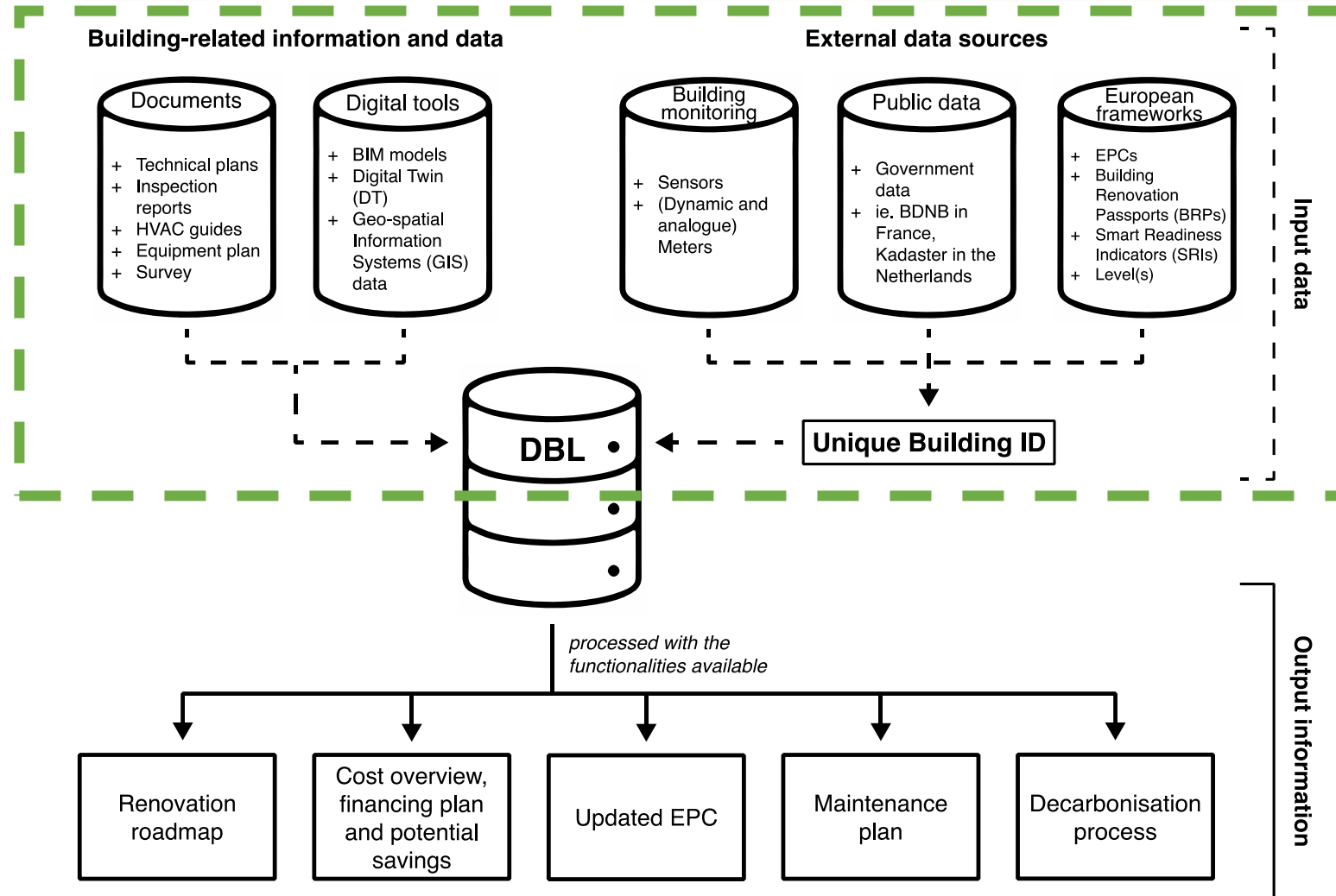
Any data, information and document relevant to the building, including:

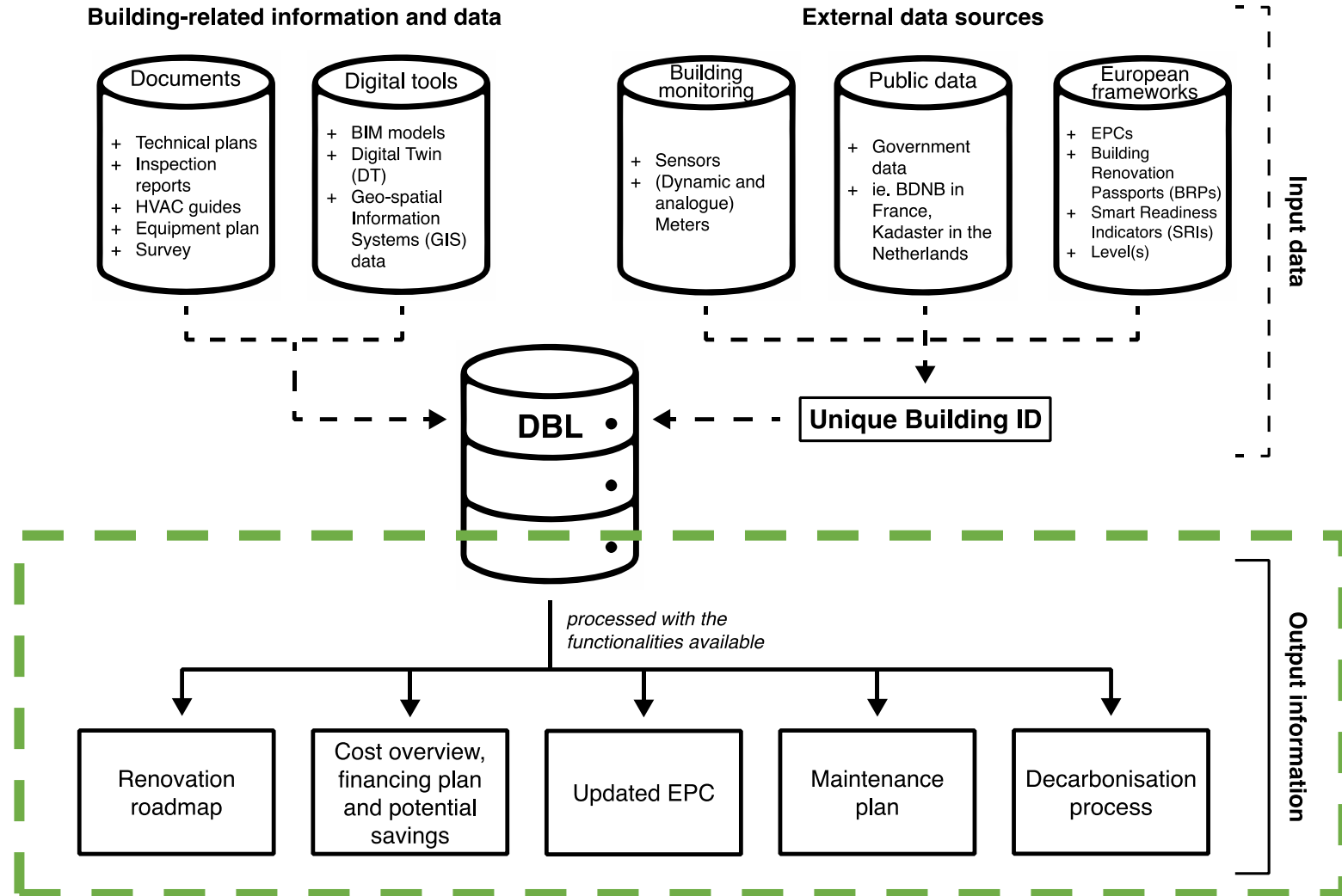
1. Administrative documents
2. Technical plans and systems
3. Description of the land, the building and its surrounding
4. Traceability and characteristics of construction materials
5. Performance data such as operational energy use and lifecycle emissions
6. Indoor environmental quality
7. Links to building ratings and certificates

The DBL in a Scheme



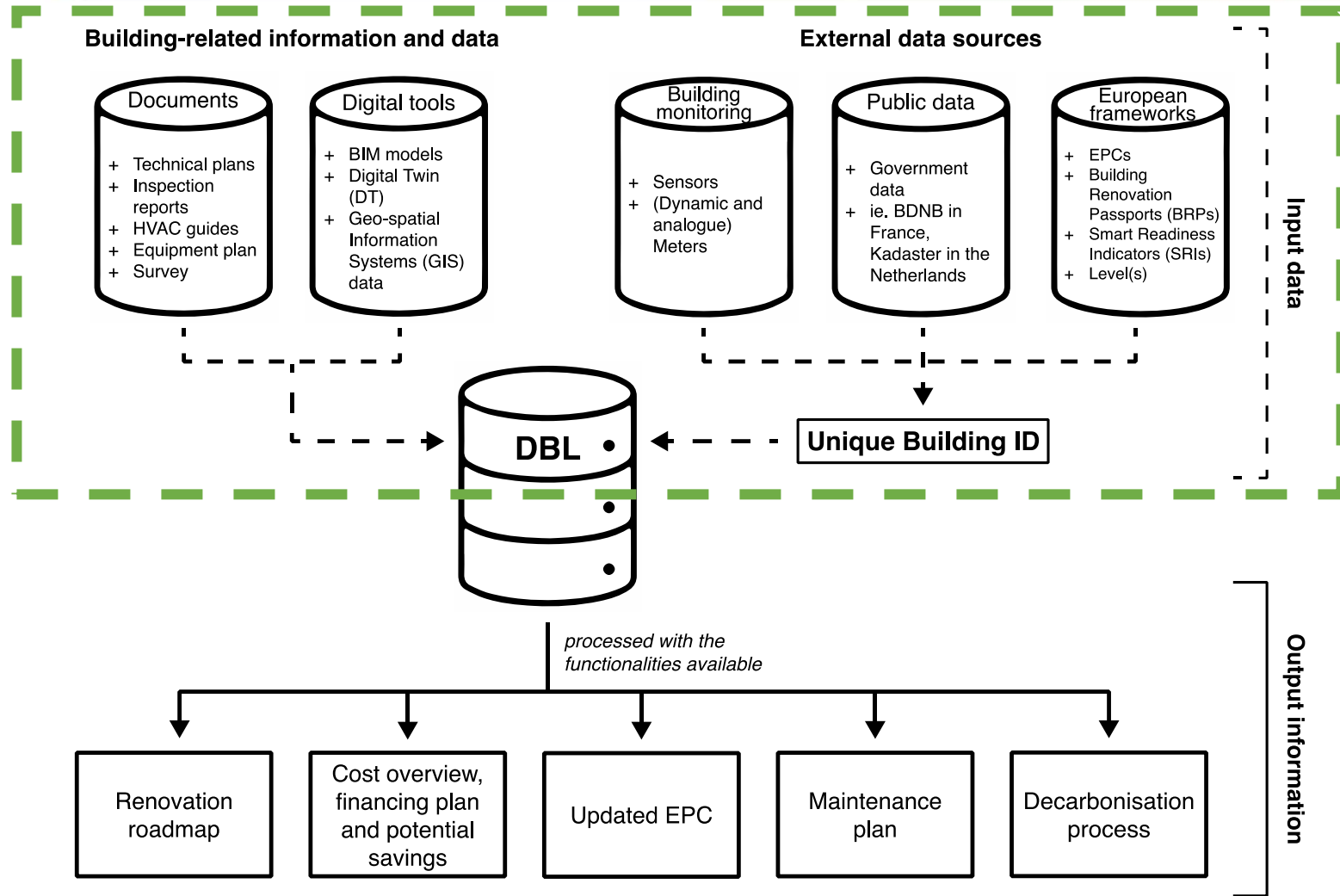
The DBL in a Scheme

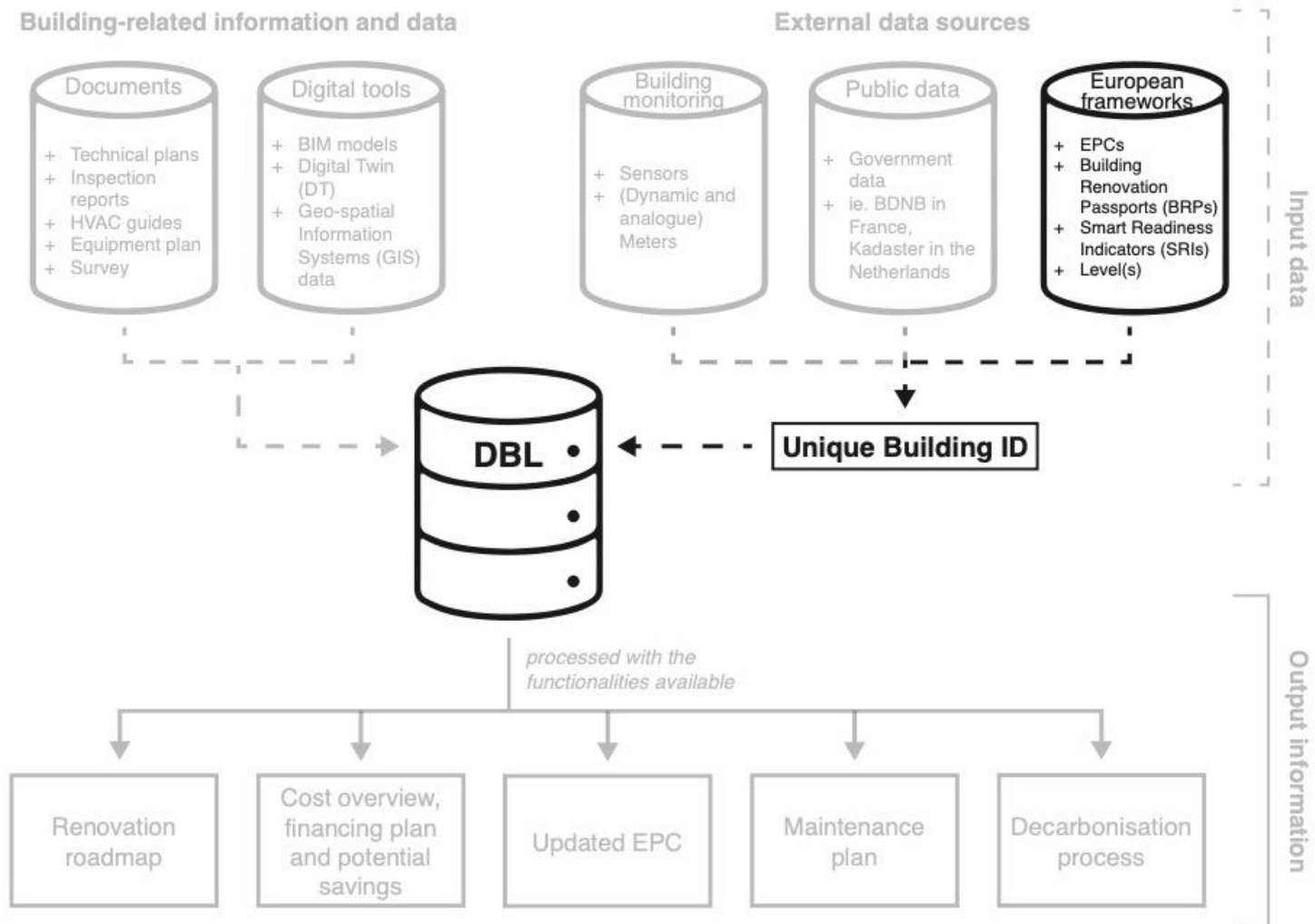




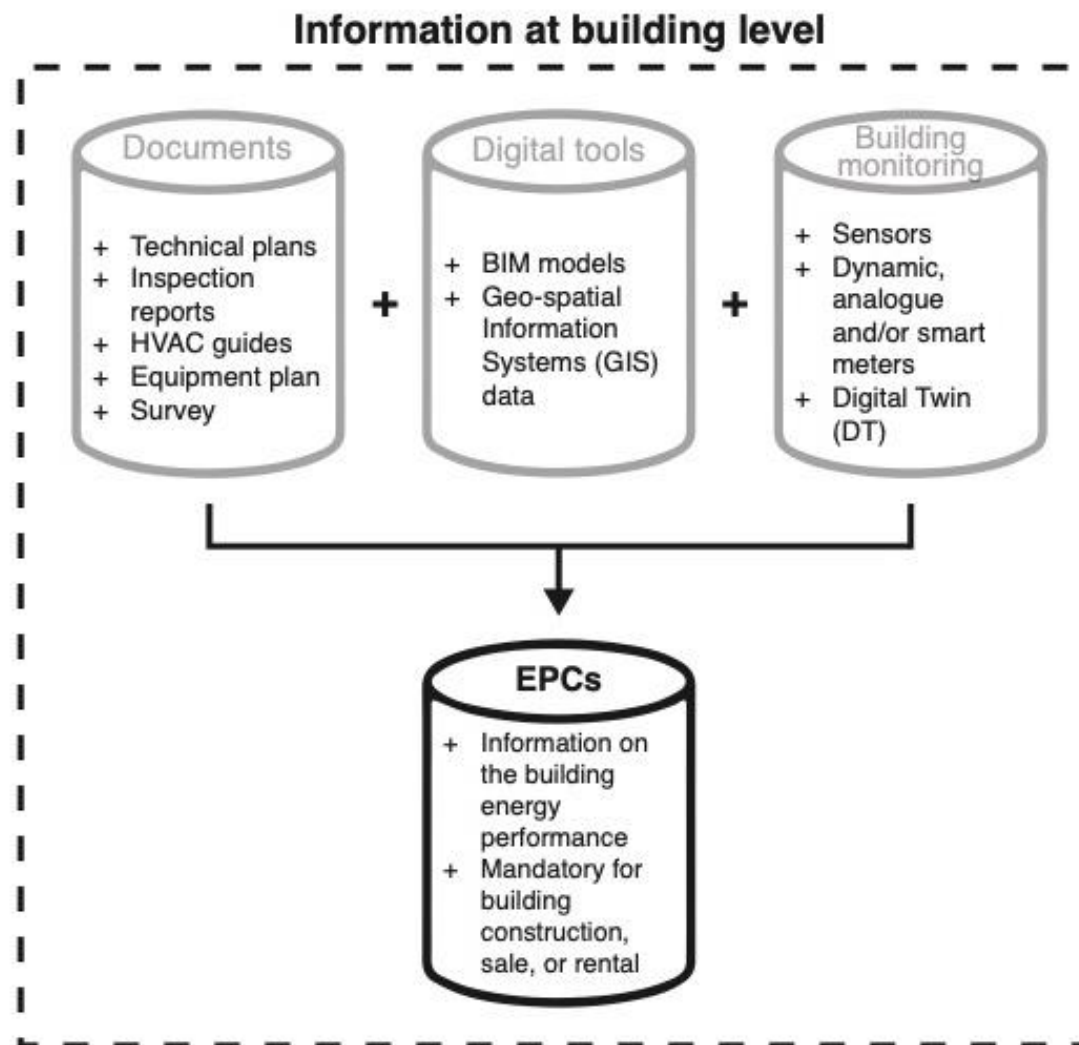
Purpose	DBL functionalities
Information storage	Digital repository to store key documents (i.e. design plans; certifications; proof of installations)
	Easy access to all relevant building-related information according to the different level of users and stakeholders
	Storage of maintenance and operation plans (may incl. predictive maintenance; notifications and alerts)
	Traceability of building materials and/or material passport
	Digital repository to store past renovations (may incl. design plans; certifications; proof of installations)
Quality and performance monitoring	Monitoring of building performance (may incl. whole life resource consumption; climate change resilience; adaptability and flexibility; health and safety; accessibility)
	Monitoring of indoor environment quality
	Monitoring of environmental impacts over lifetime (i.e. demolition and re-use of materials)
Building assessments and calculations	Visualising future energy/cost-saving potentials and lifecycle costing
	Estimation of environmental impacts of building lifetime
	Indication of the smart readiness of the building
	Provision of building renovation roadmaps (or integration with building renovation passports)
	Provision of automated renovation advice
	Provision of overview of the building stock
	Benchmarking, reporting and links to similar buildings, various certification and assessment schemes
Integration with external sources	Option to consent for third party use of data (Third parties may include (prospective) buyers and tenants, real estate, financing institution, construction professionals & governing bodies)
	Integration with construction project management tools for planning and financing (To assign roles, key performance indicators (KPIs), accountability and liabilities during the design, development and construction phases)
	Enabling integration of BIM
	Enabling integration with smart energy services (i.e. demand response; dynamic pricing)
	Links to financial incentives
	Enabling integration with asset management tools

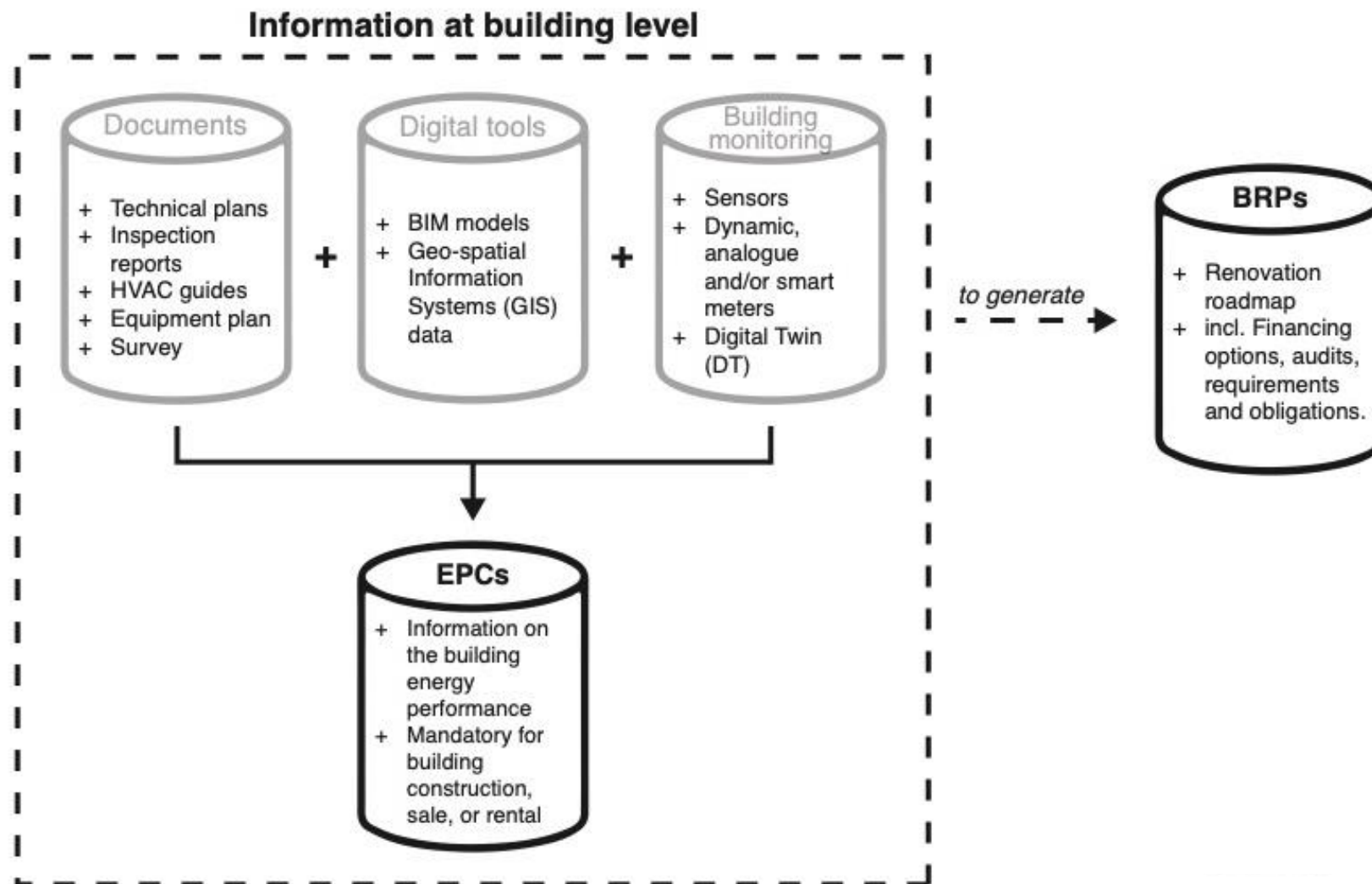
The DBL in a Scheme

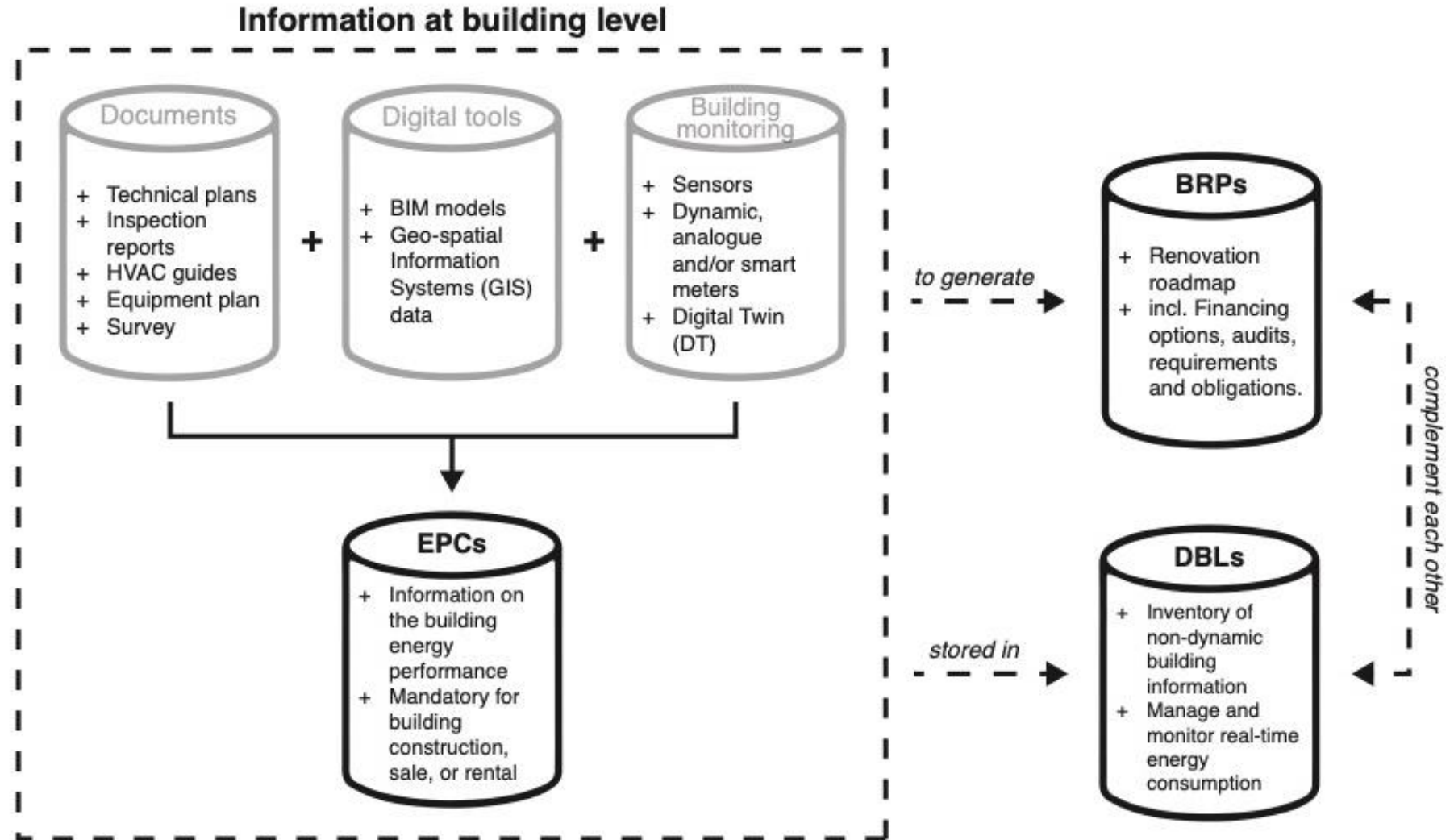


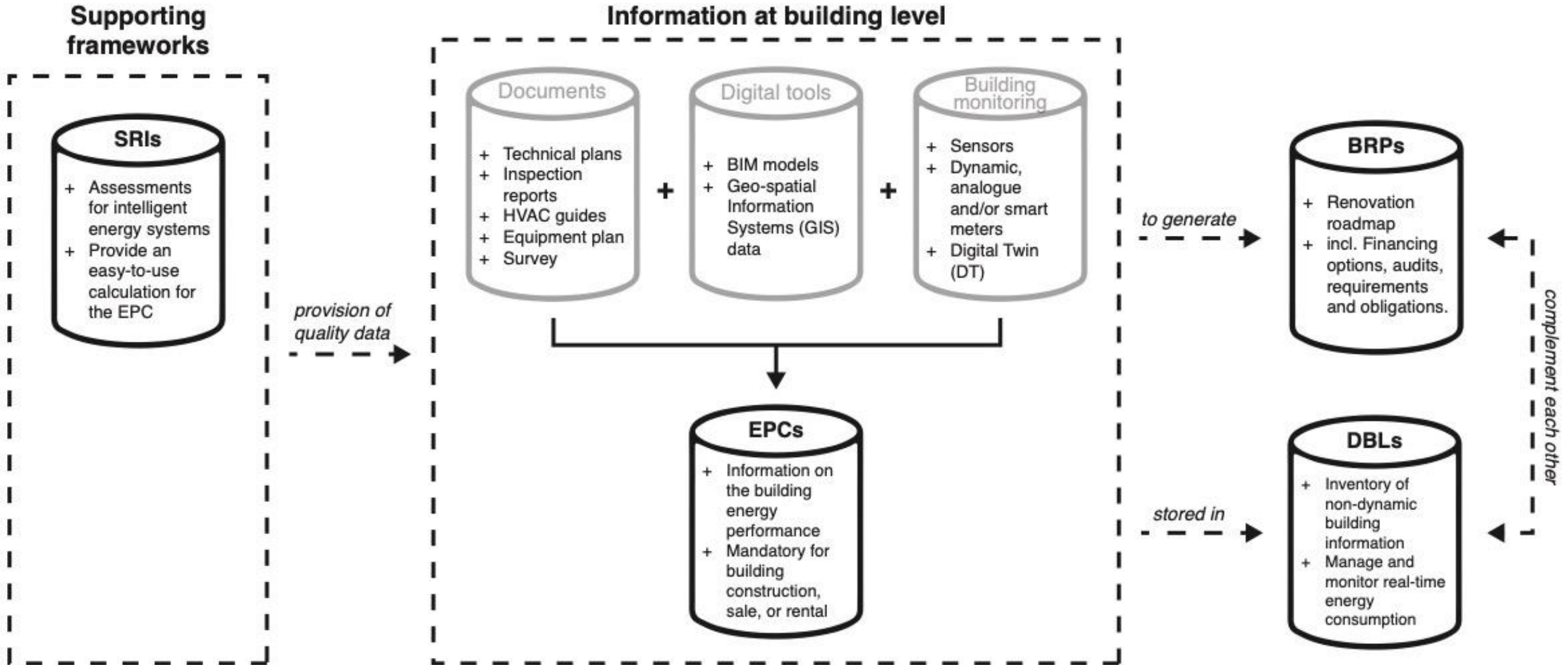


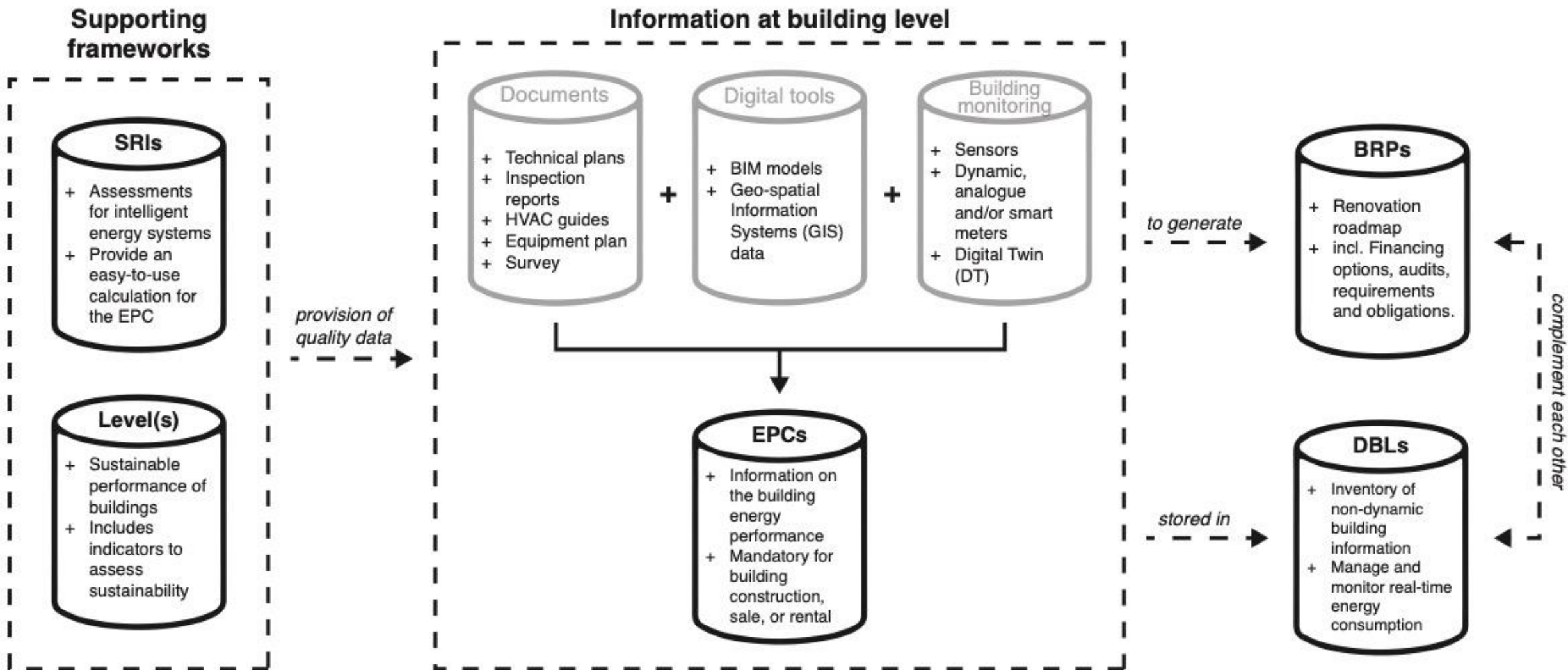
The Circular Economy Action Plan recognise[s] digital building logbooks as enablers for circularity and the **Renovation Wave** states these digital tools will **integrate all related data** from the upcoming **building renovation passports (BRPs)**, **smart readiness indicators (SRIs)**, **Level(s)** and **energy performance certificates (EPCs)**.











Flemish Energy Agency

(Vlaams Energie- en Klimaatagentschap; VEKA)



**VLAAMS
ENERGIEAGENTSCHAP**

Public Waste Agency of Flanders

(Openbare Vlaamse Afvalstoffenmaatschappij; OVAM)



**SAMEN MAKEN WE
MORGEN MOOIER**

OVAM

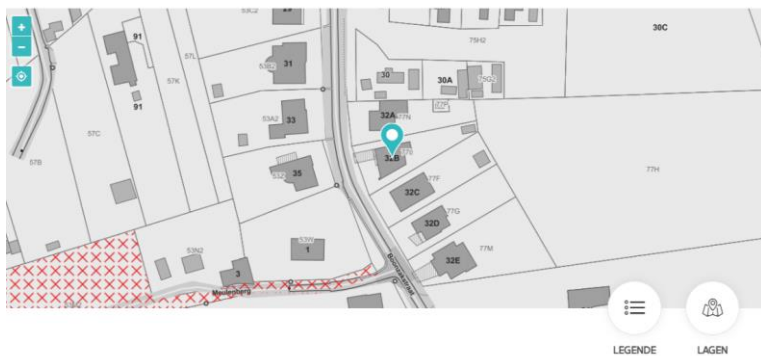
Department of the Environment and Living

(Departement Omgeving en Wonen in Vlaanderen)



Vlaanderen
is omgeving

Soil characterisation



Gronden die in het grondeninformatieregister zijn opgenomen, worden op de kaart aangeduid met een blauwe arcering.

Een grond wordt opgenomen in het grondeninformatieregister zodra de gemeente het opneemt in de [gemeentelijke inventaris](#) en deze gegevens doorgeeft aan de Openbare Vlaamse Afvalstoffenmaatschappij (OVAM) of zodra bij de OVAM een rapport van een bodemonderzoek is ingediend of een schadegeval is gemeld. Meer informatie leest u op www.ovam.be/gir.

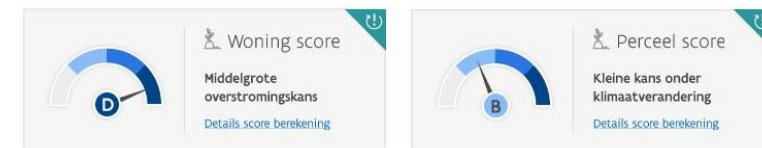
Water & Sewage

Algemene informatie	
Rioolbeheerder	Fluvius Limburg
Website rioolbeheerder	https://www.fluvius.be/nl/contact
Riolering	Riolering aanwezig Meer info
Aansluiting met riolering	Aanwezig en aangesloten

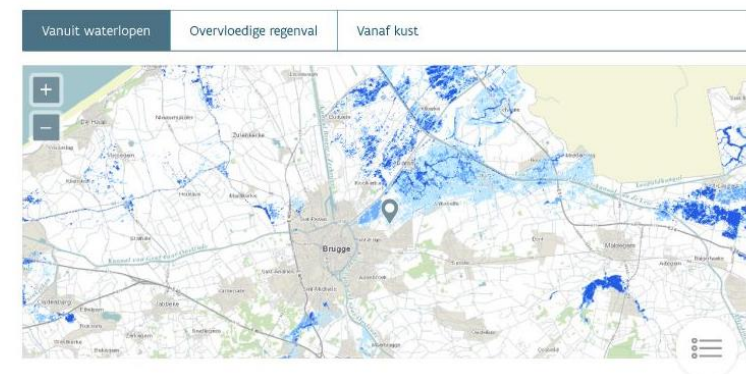
Op de kaart ^[1]



Flood sensitivity



Overstromingen op kaart



EPB, EPC and renovation-obligations

Renovatieverplichting na overdracht [?]

A Uw huidige EPC-label
Bekijk hieronder aan welk EPC-label uw woning moet voldoen als u uw woning verkoopt.

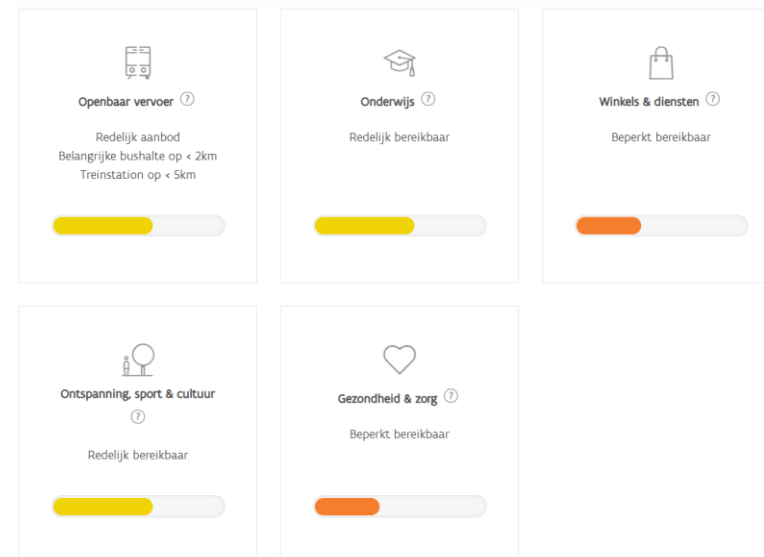
Als u uw woning vanaf 2023 verkoopt of sindsdien aangekocht hebt, valt uw woning onder de [renovatieverplichting](#).



Building permits

2013		PLAATSEN ZWEMBAD Stedenbouwkundige vergunning oud stelsel Dossiernummer: 02/2013 Aangevraagd op 16/11/2013 Vergund op 04/12/2013 Vergund door College van burgemeester en schepenen Hasselt
		PLAATSEN VERANDA Stedenbouwkundige vergunning reguliere procedure 2009 Dossiernummer: 02/2013 Aangevraagd op 15/04/2013 Vergund op 19/07/2013 Vergund door College van burgemeester en schepenen Hasselt
2012		PLAATSEN CARPORT Stedenbouwkundige vergunning oud stelsel Dossiernummer: 02/2012 Aangevraagd op 21/12/2011 Vergund op 05/01/2012 Vergund door College van burgemeester en schepenen Hasselt

Mobiscore



Dwelling quality

Gebreken volgens de regelgeving van toepassing tot en met 31/12/2020



Uit het technisch verslag opgesteld op 12/10/2020 blijkt dat uw woning volgens de regelgeving van toepassing tot 01/01/2021 een conformiteitsattest kan krijgen als uw woning voldoet aan de rookmeldersverplichting en er geen herstellordering op de woning rust, maar toch kleinere gebreken vertoont die u best herstelt.

Raadpleeg het tabblad "Conformiteitsattesten en besluiten" voor de meest actuele beslissing over de kwaliteit van de woning.



Gebouw

- ✓ Brandveiligheid
- ✓ Buitenmuren (en gemeenschappelijke muren)
- ✓ Dak(en)
- ✓ Draagvloer(en)
- ✓ Dragende binnenmuren
- ✓ Elektriciteit

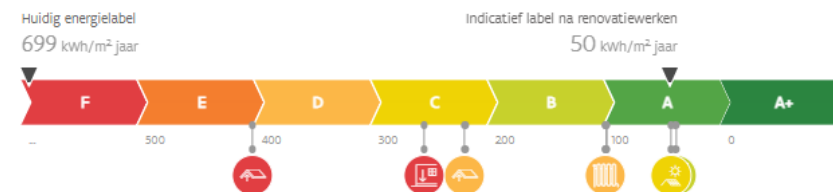


Woning

- ✓ (Draag)vloer(en)
- ✓ Badfunctie
- ✓ Dak(en) of (hellende en vlakke) plafonds
- ✓ Elektriciteit
- ✓ Keukenfunctie
- ✓ Licht

Renovation advice

Hoe kunt u naar een label A evolueren? [?]



Advies uit EPC [?]

	Huidige situatie	Aanbeveling	Indicatie gemiddelde prijs <small>Laatst opge maakt op 2020</small>	
	Daken 75 m ² van het dak is te weinig geïsoleerd.	Plaats bijkomende isolatie. 1 premie beschikbaar	€ 8500 - € 11000	Toon meer
	Vloeren 150 m ² van de vloer is niet geïsoleerd.	Plaats isolatie. 1 premie beschikbaar	€ 5000	Toon meer
	Daken 75 m ² van het dak is te weinig geïsoleerd.	Plaats bijkomende isolatie. 1 premie beschikbaar	€ 9000 - € 13500	Toon meer
	Verwarming De woning wordt inefficiënt verwarmd.	Vervang de inefficiënte verwarming. 2 premies beschikbaar	€ 9000 - € 13500	Toon meer
+ Toon meer aanbevelingen				

Why Should We Study the DBL?

1. For a DBL to generate more accurate and effective strategies for high-impact building renovation, a **wider spectrum of functionalities** should be included.
2. To enable a larger number of functionalities, a **wider range of data fields** should be collected by the DBL.
3. A wider range of data fields suggests a **wider variety of data sources**, also including external sources.
4. The **digitisation of the AECO*** sectors will lead to the **collection of larger amounts of heterogeneous data** through digital innovations such as (real-time) monitoring, Artificial Intelligence (AI), and Digital Twins (DT).
5. **Increasing the interoperability** between the various data sources is therefore essential.



4GH BUILDING DIGITAL TWIN International Congress

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