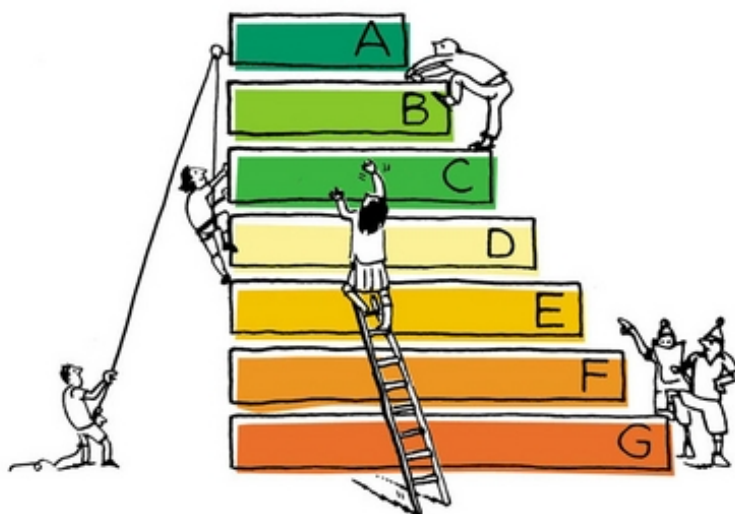


Understanding the concept of Building Renovation Passports

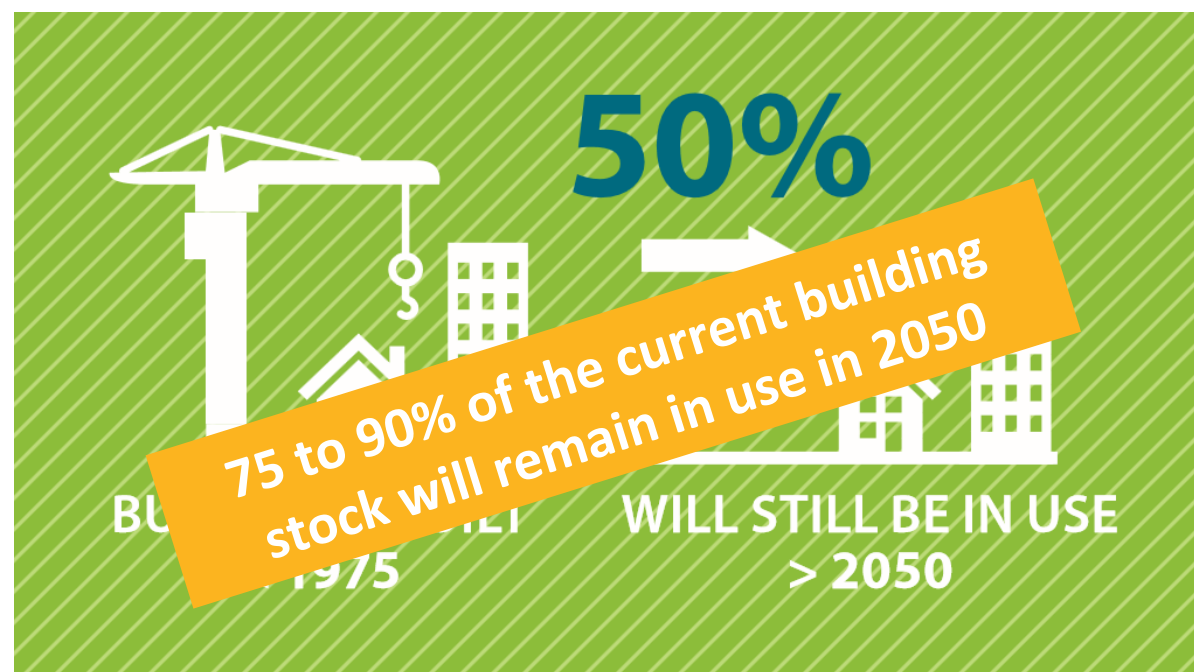
Mariangiola Fabbri

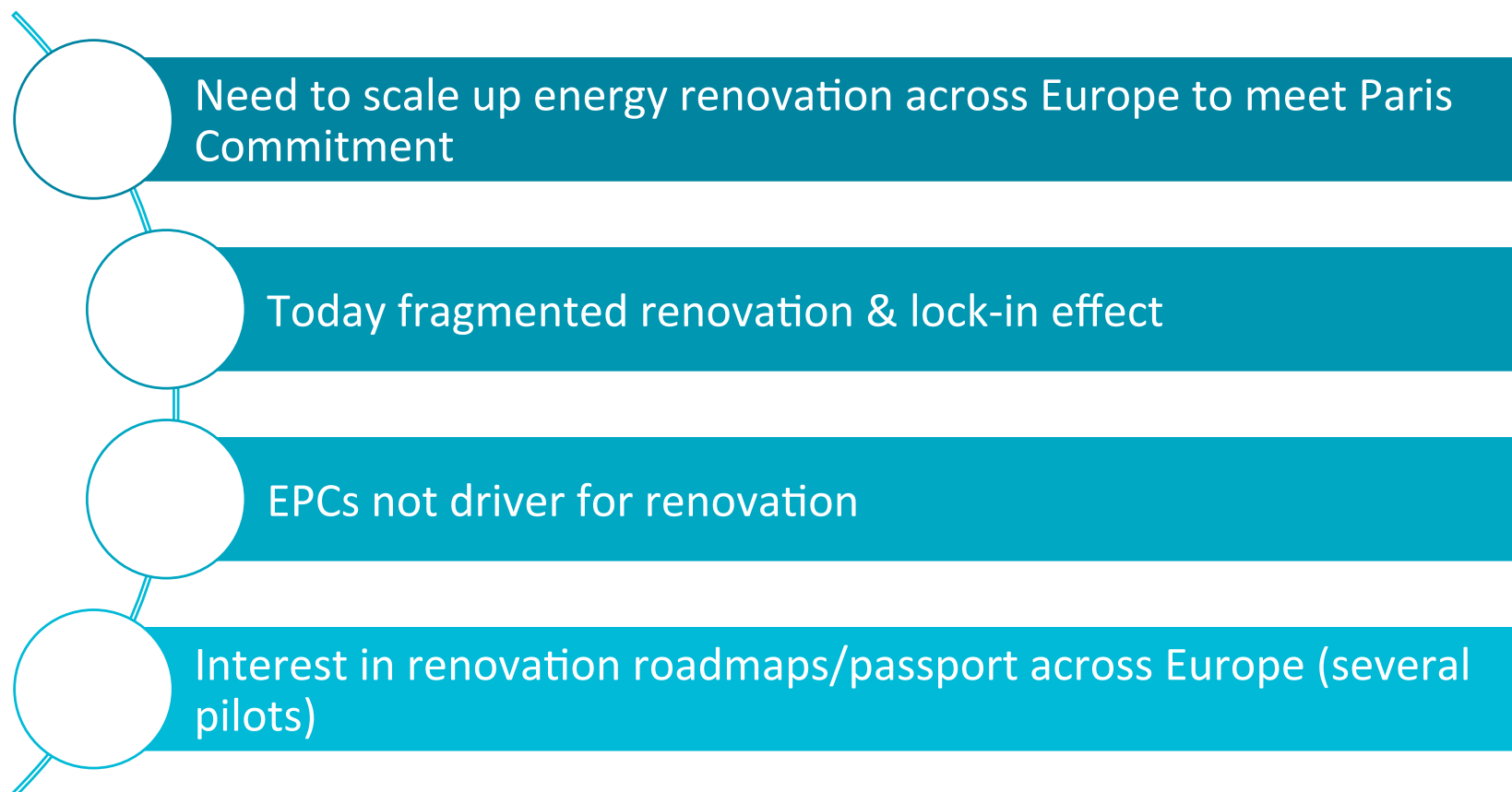
Senior Project Manager

Buildings Performance Institute Europe

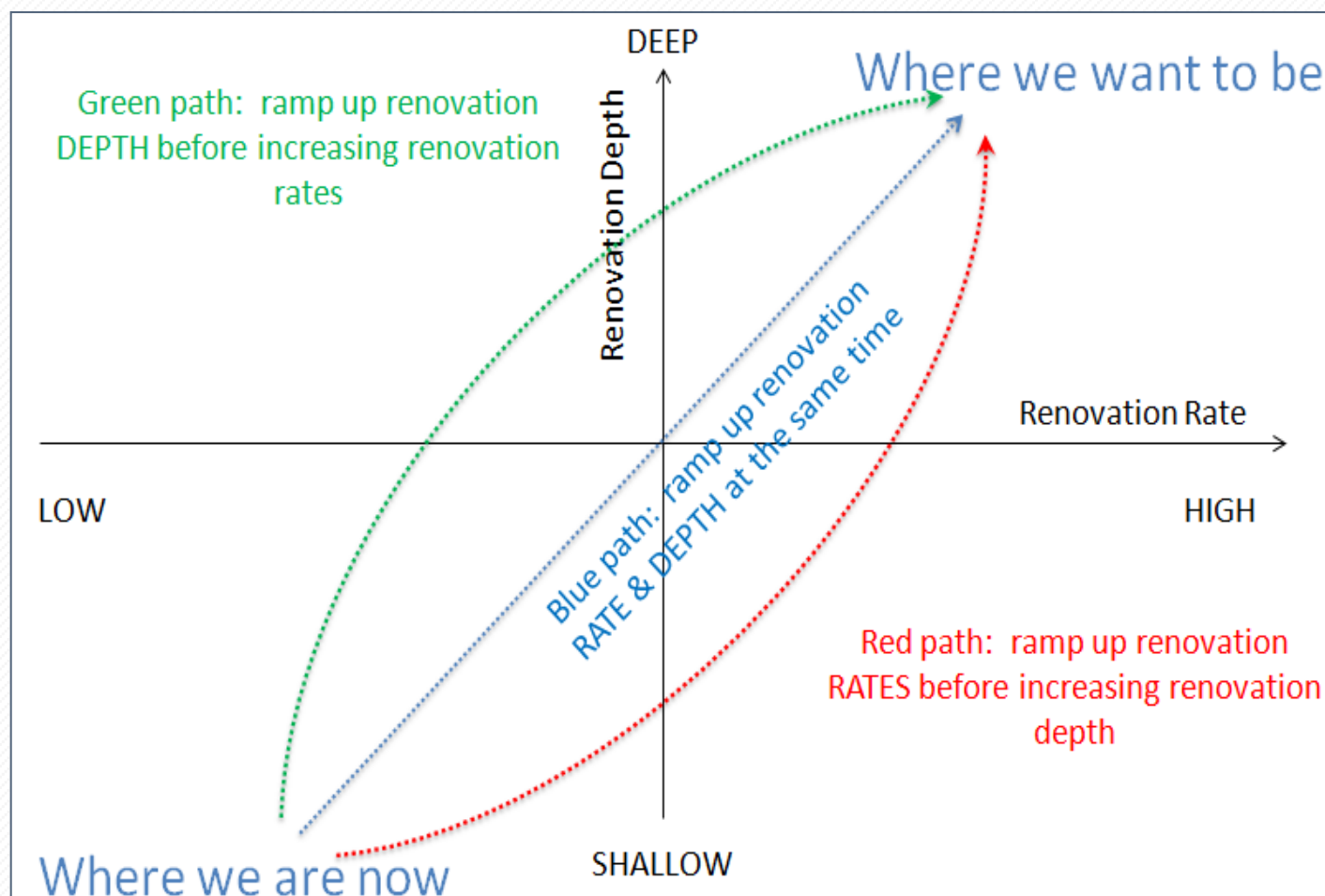


Our main challenge: Renovation of existing building stock





Choosing the renovation path



How to avoid lock-in effect and build future proof?

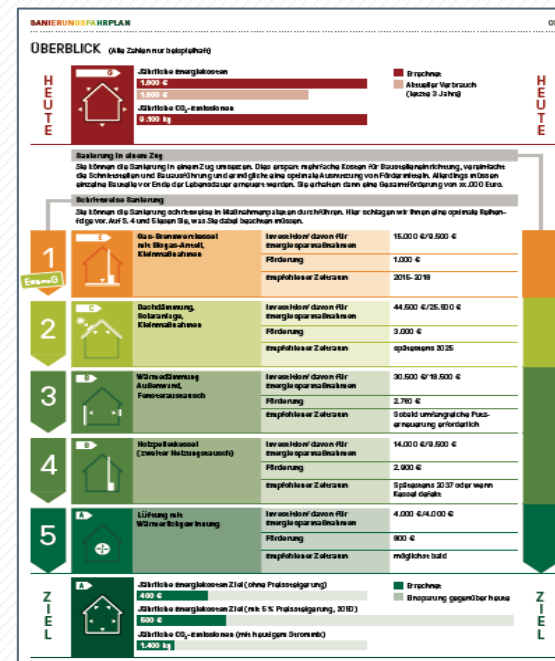


RENOVATION

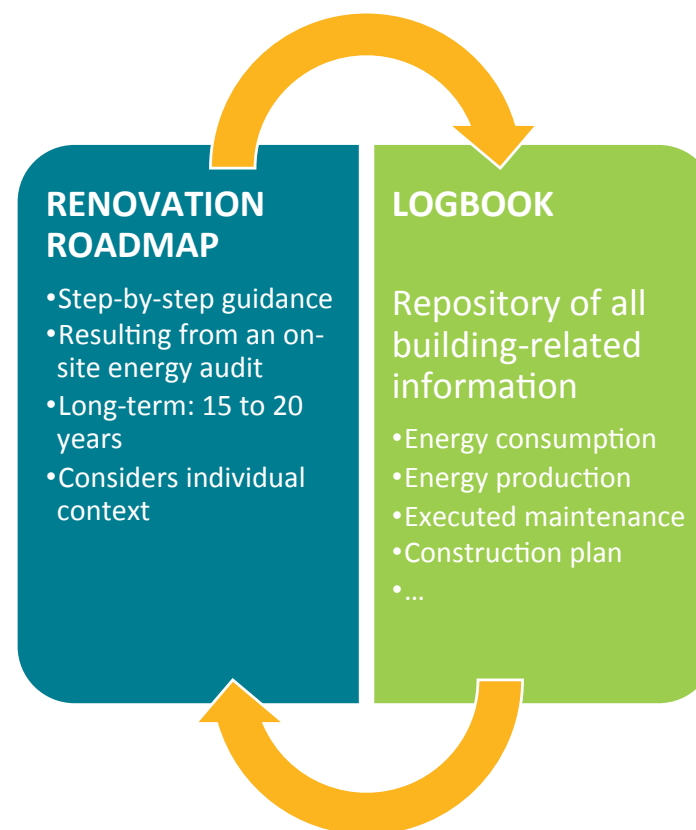
HOLISTIC DEEP RENOVATION



STAGED DEEP RENOVATION

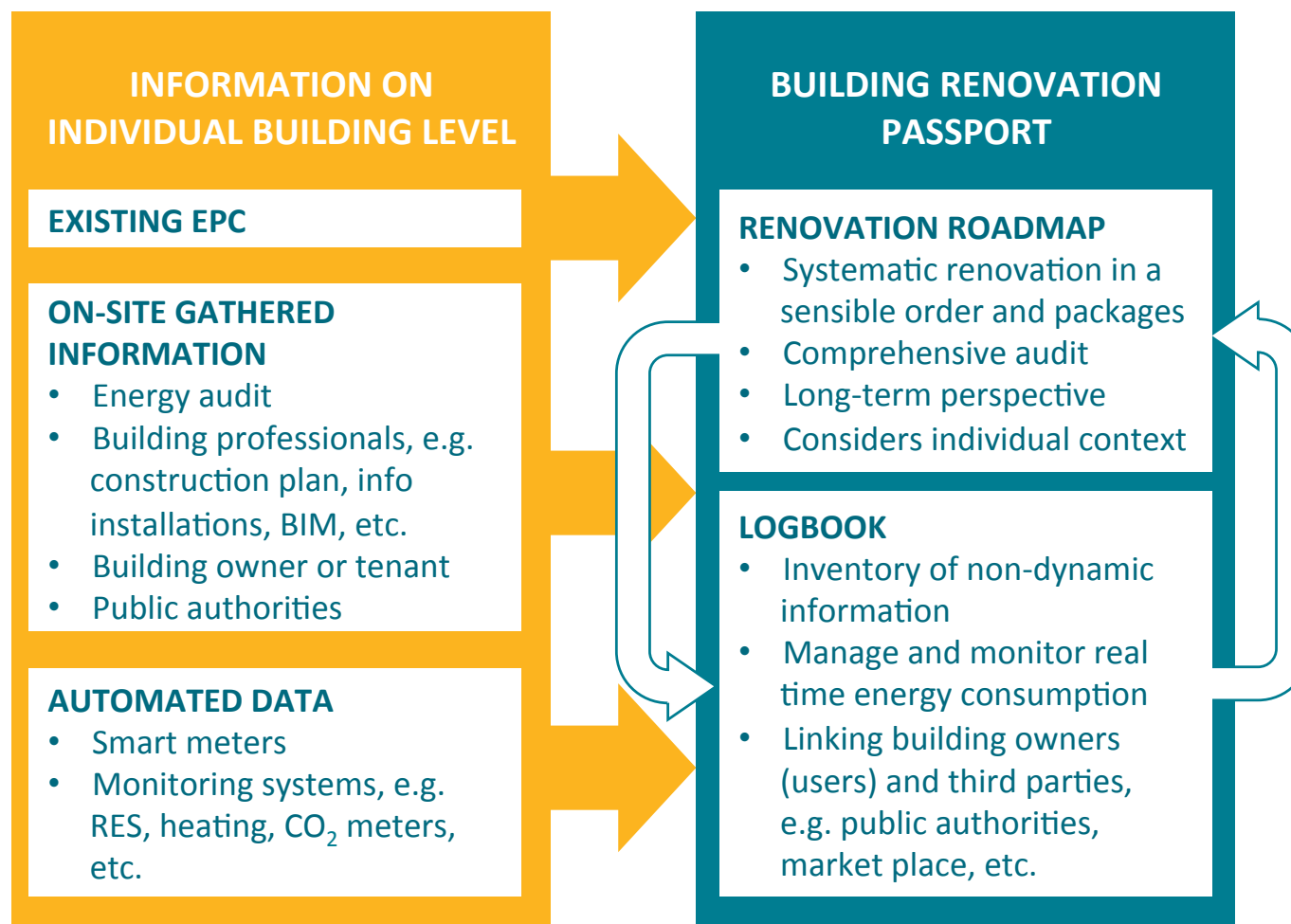


What is a Building Renovation Passport?



Building Renovation Passport potential tool to deliver (staged) deep renovation

Three case studies: Belgium(Flanders), France and Germany



Case studies: Flanders (Belgium), France, Germany



- ***Voluntary tool*** (complementary to EPC) – link to EPBD?
- ***Ambition:*** long term renovation targets (deep renovation or long term efficiency levels)
- ***On-site energy audit*** as first step
- ***Open dialogue with building owners:*** building owners are at the centre of the process (customised measures)
- ***A new way to measure comfort*** (qualitative element)

Common guiding principles



Long-term perspective

- Vision for building stock 2050, definition of deep renovation or energy efficiency levels required

Timing and sequencing of actions

- Short-term and long-term measures included, order of implementation key to achieve deep renovation

Customer engagement and individual context

- Put the owner at the centre (wishes, needs, constraints)

User-friendly tool (for the auditors and the users)

- Make it easy to understand/use/promote
- Auditors as ambassador for deep renovation

Common guiding principles

Automation

- Easy to use for the energy experts (modular blocks, default values, highlights errors/anomalies, etc.)

Stakeholder engagement

- Go beyond the building sector (behavioural experts, data analysts, communication strategists)

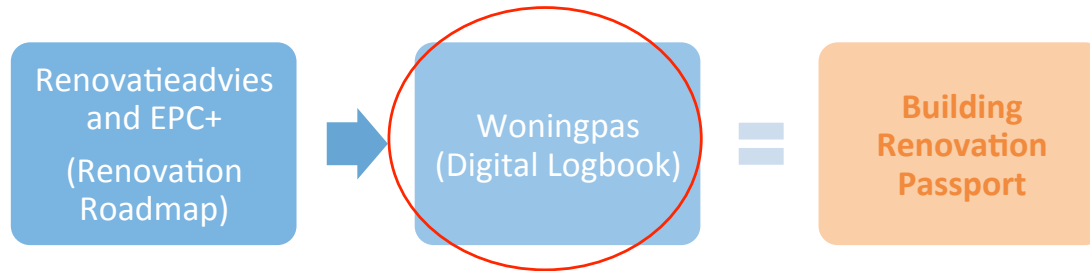
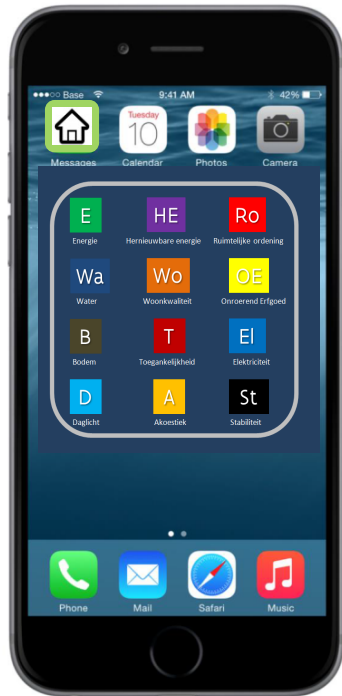
Promote comfort as a driver for renovation

- Clearly indicate positive impacts on comfort
- Include indoor air quality, acoustics, lighting, daylight, fresh air supply among main indicators

Provide appropriate regulatory framework (EPBD)

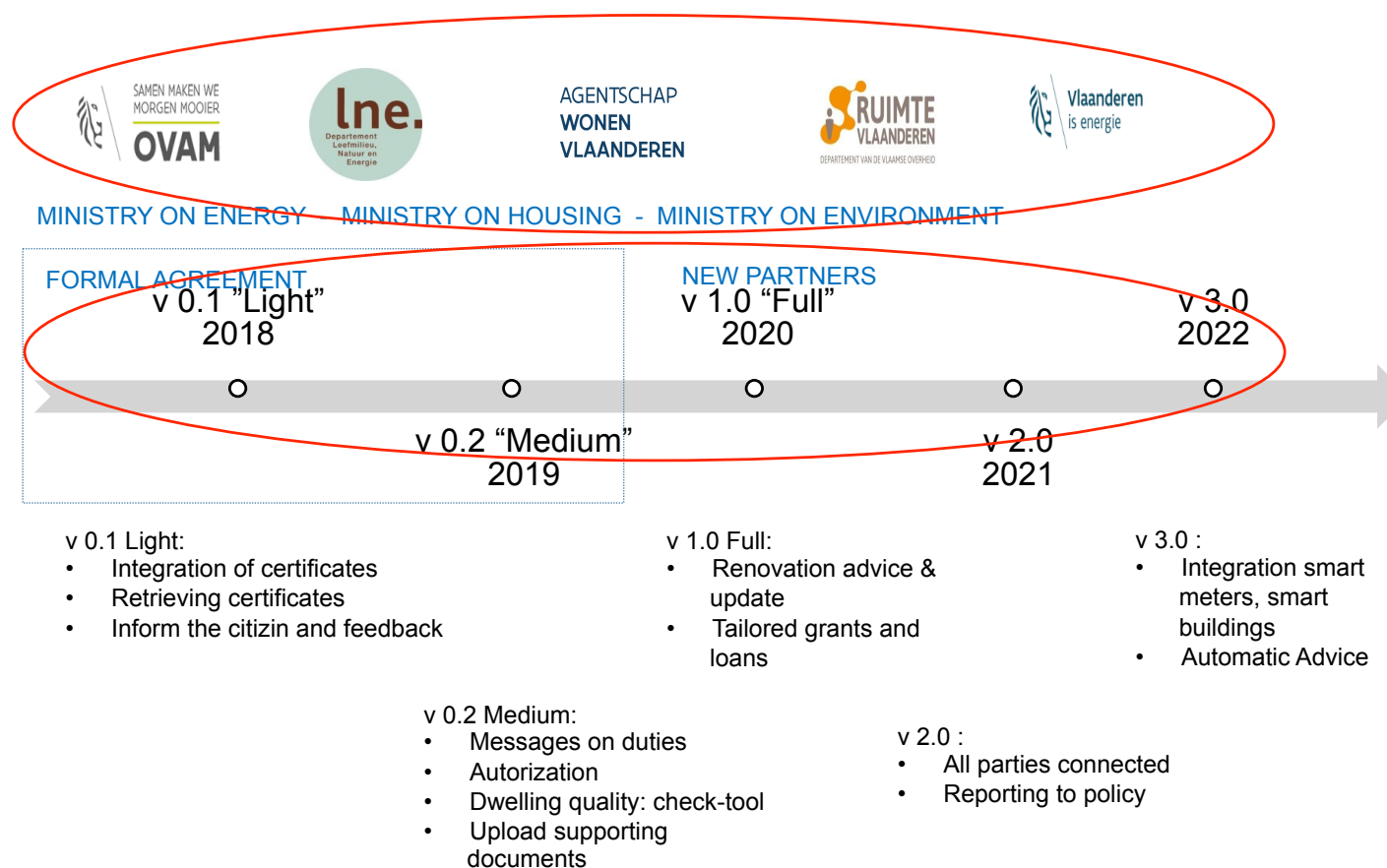
- Long-term vision for EU building stock, link BRP to EPC, common approach to deep-staged renovation (including tools and methodological guidelines)

Belgium-Flanders: Concept Building Logbook



- ▶ **Unique digital integral** file of each dwelling
- ▶ **Instrument** for the building owner & buyer to get view on building aspects
Modular:
 - **Energy and Other building aspects**
e.g. spatial planning, heritage, water, soil, asbestos, flooding sensitivity, electricity, renewable energy, ...
 - **Information, data, certificates**
 - **Consultable** by the owner and authorised persons
e.g. occupants, architect, contractor, notary, expert, ...
- ▶ **Digital Safe** for building information and performed works
- ▶ **One-pager** with certificates

Flanders: Roadmap for the Building Passport



New Horizon 2020 project: iBRoad

	Starting concepts	Test run concept & tools	Stakeholder involvement & promotion
Austria			V
Belgium - FL	V		V
Bulgaria		V	V
France	V		
Germany	V	V	V
Greece			V
Poland		V	V
Portugal		V	V
Sweden			V

- 2017-2020
- Develop, test and demonstrate the full concept of iBROAD in pilot countries
 - methodology for energy audits
 - database structure
 - interfaces and modules
- Feasibility and replicability



Thank you...

Find the report at:

<http://bpie.eu/publication/renovation-passports/>

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