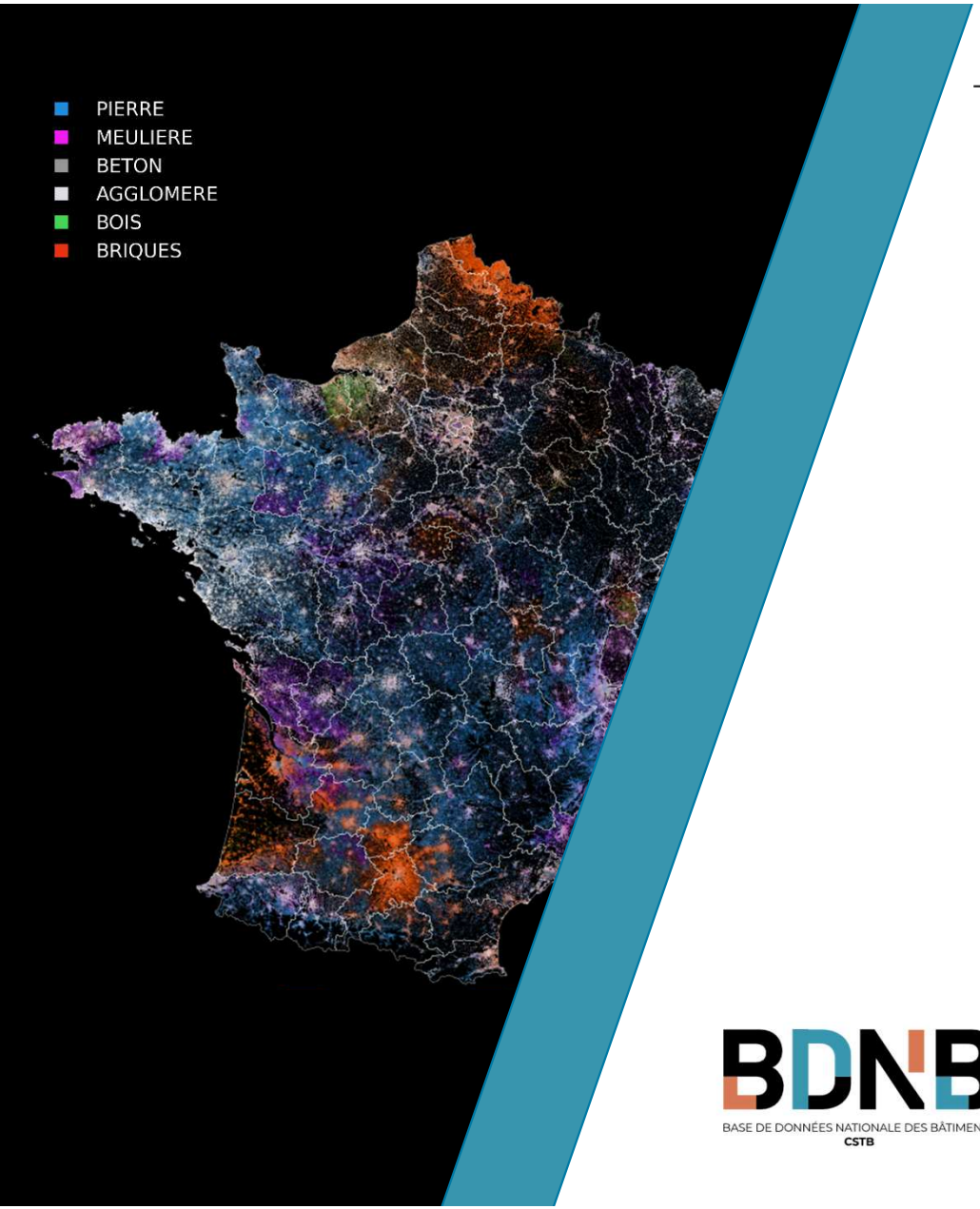

BDNB

FRENCH NATIONAL BUILDING DATABASE

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BASE DE DONNÉES NATIONALE DES BÂTIMENTS
CSTB

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BUILDING DATA: SCATTERED AMONG USE-CASE SPECIFIC DATABASES

Address

BDTOPO IGN

3D building geometry

Fiscal administration

base DPE de l'ADEME

Energy Performance Certificates

Property Sale prices

Données locales de l'Energie

Real Energy consumption

Permis de construire SITADEL 2 complet

Building permit

Base Points de livraison

Energy Networks

natural hazards

Base des QPV

Base SIREN

Base immeuble localisé

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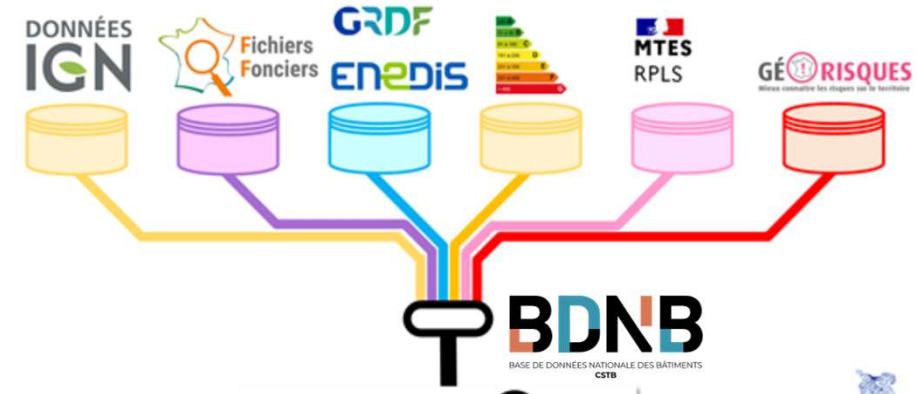
BDNB: A UNIFIED DATABASE FOR ALL BUILDING USE-CASES



GO RÉNOVE

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Cross-matching of data

Prediction of missing values

KPIs calculation

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BDNB IN SUPPORT OF PUBLIC POLICIES FOR THE ENVIRONMENTAL TRANSITION AND ADAPTATION TO CLIMATE CHANGE FOR BUILDINGS

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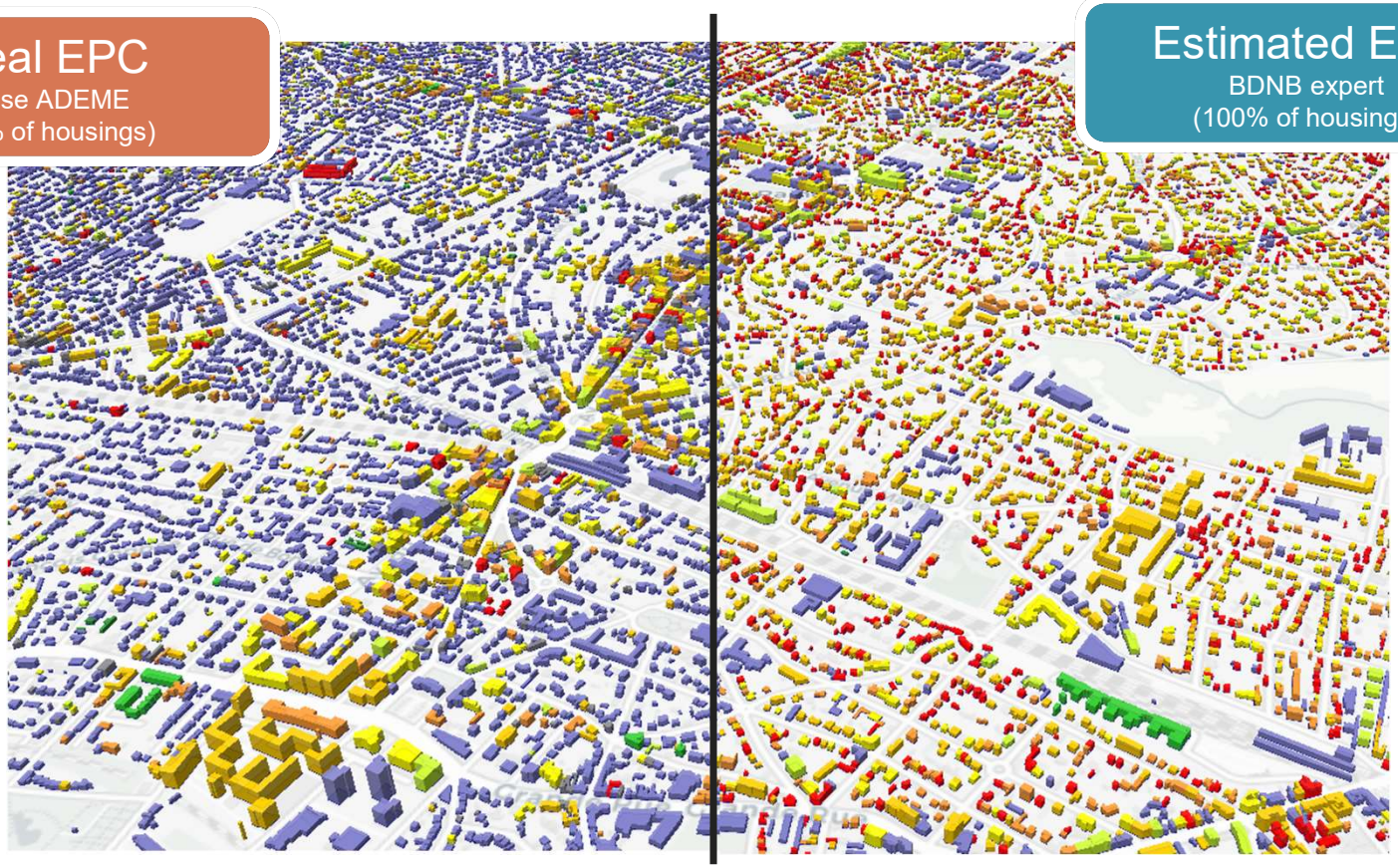
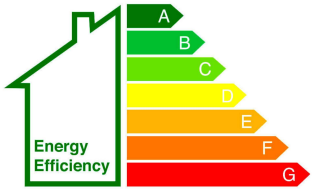
BETTER KNOWLEDGE OF ACTUAL BUILDING STOCK STATE

Real EPC
Base ADEME
(20% of housings)

Estimated EPC
BDNB expert
(100% of housings)





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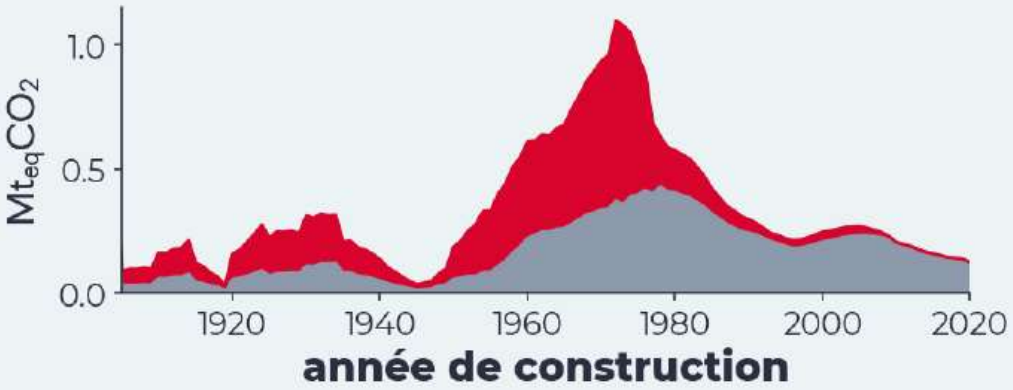
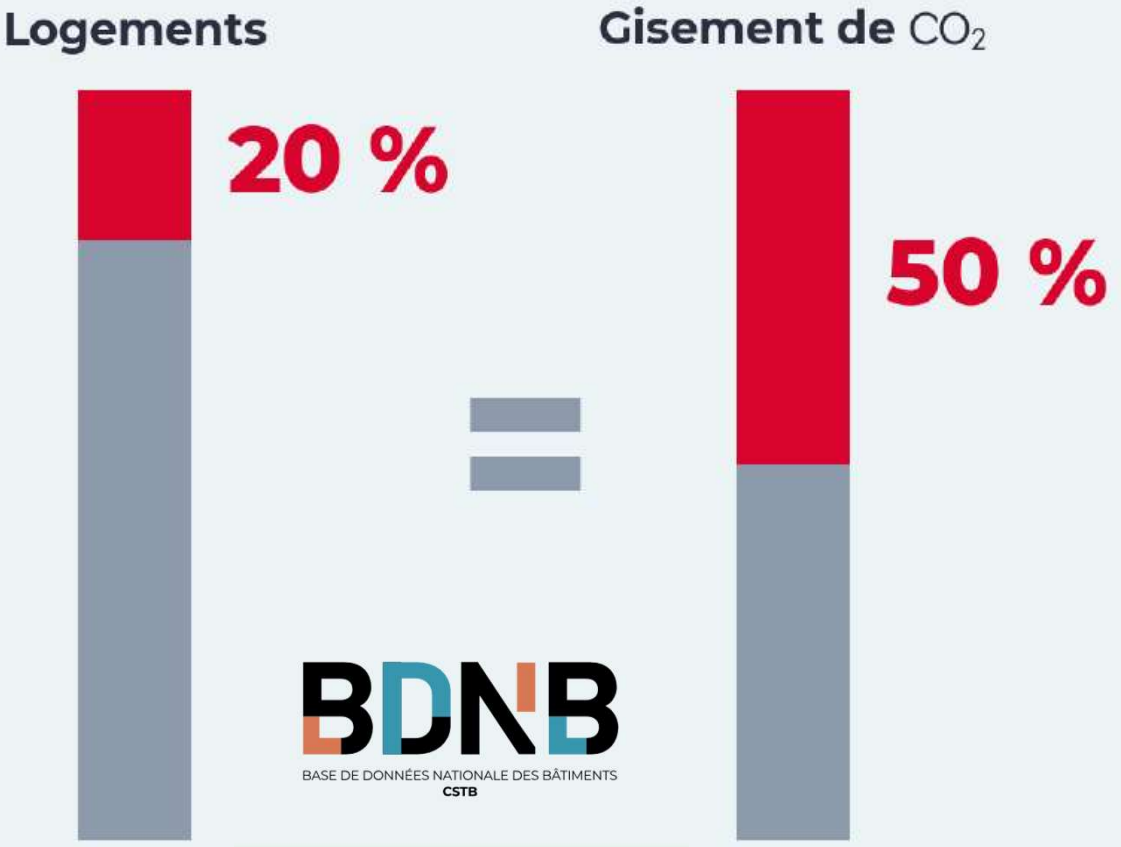
SIMULATING PUBLIC POLICY IMPACTS WITH ADVANCED MODELING

With BDNB we were able to find that heavily renovate 20% of housings only could correspond to 50% of the renovation potential of all residential building in France





* Estimations basées sur une hypothèse de rénovation globale (isolation, changement de chauffage...). Méthode d'évaluation basée sur la méthode DPE arrêté 2021. Périmètre : 5 postes règlementaires : chauffage, ECS, ventilation, refroidissement, éclairage.

Sources : BDNB 2022-10-b, Fichiers Fonciers 2022, ©BDTOPO 2022, ADEME DPE 2022

IDENTIFY THE SPECIFIC BUILDINGS TARGET OF THE POLICY

Identify the buildings that are in the 20%

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FRENCH EPC DATA MODEL

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THE KEY ASPECTS OF FRENCH EPC DATA MODEL

Enforceable description and measurement:

- All descriptives and measured input characteristics of an EPC are enforceable and if wrong can be contested for any real estate transaction. (the input are enforceable not the calculation itself)
- The source of the information is explicit (document, measurement, observation)

Can be reused/recalculated :

- All descriptive inputs for all components that are necessary for the calculation of EPC KPIs are provided in the xml, easy to get , easy to integrate in renovation process.

Properly identified

- address
- building
- Housing unique tax administration number

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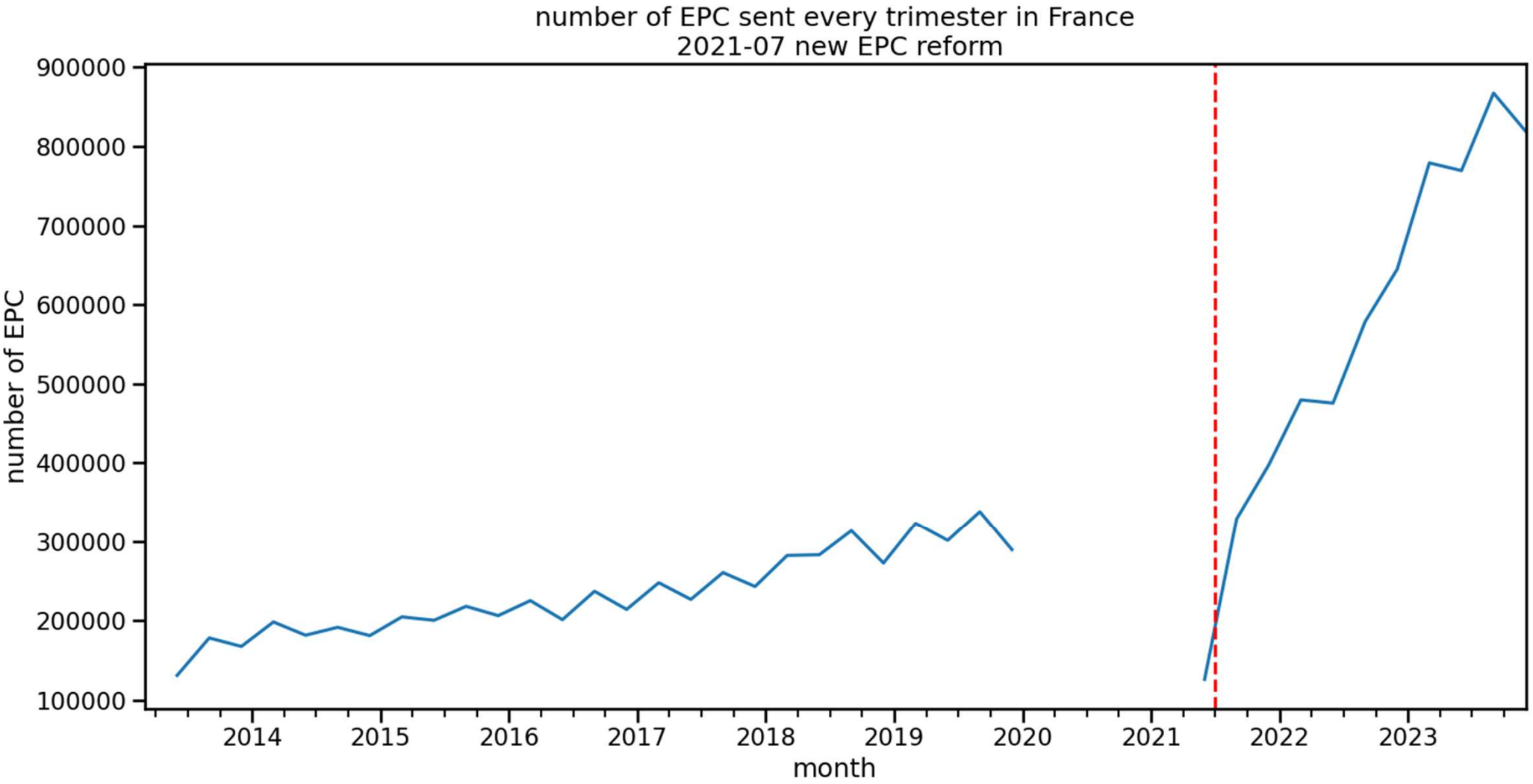
25% of residential buildings are covered with an EPC in France (2024)



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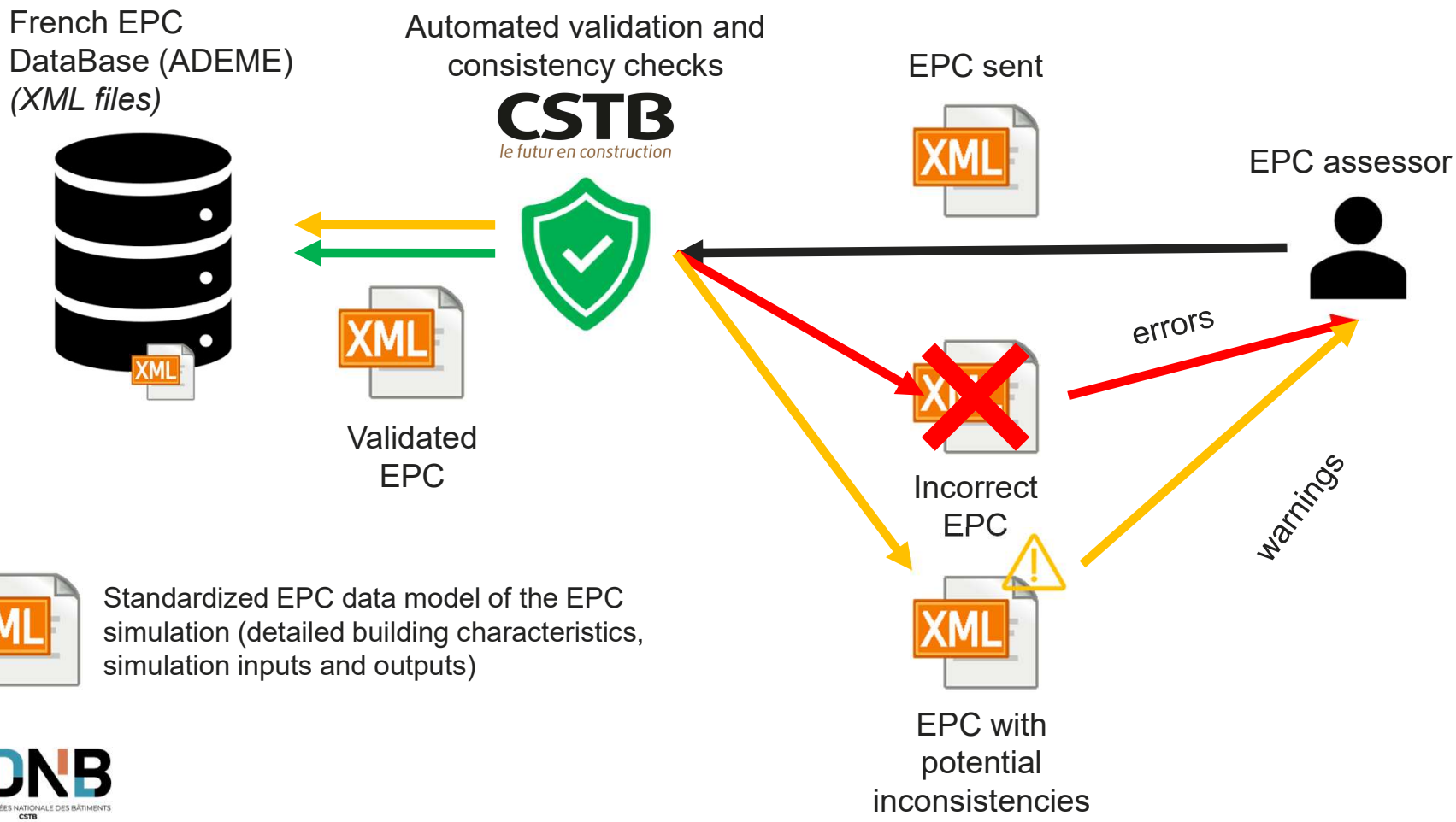
PRINCIPLE OF DATA VALIDATION FOR FRENCH EPC



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EPC RECAST DATA MODEL

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THE KEY ASPECTS OF EPC RECAST DATA MODEL

Based on French EPC logic :

- Descriptive model for all its components. (for a wall required : MainLayerMaterial, InsulationPosition, InsulationThickness etc.)
- All properties are described with a source and uncertainty level.

Linked to european norms :

- For HVAC systems, performance indicators are using EPREL rating and key technical indicators. (seasonal efficiency, power etc.)

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