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EeDaPP

Energy efficiency
Data Protocol
and Portal

EeDaPP: Consortium Update on Energy Efficient Portal

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Venice

Hypoport: Vincent Mahieu

27 September 2019

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EeDaPP – Overview of activities

Progress EeDaPP

- ▶ Timeline of events & Milestones

Current state of EeDaPP

- ▶ Overview of working packages
- ▶ Pilot Phase

Regulatory Landscape

- ▶ Securitisation Regulation
- ▶ HTT / NTT Covered Bond Label

Political Landscape

- ▶ New European Commission
- ▶ Hallmark project Green Deal

Proof of Concept – Energy Efficient Portal

- ▶ Example

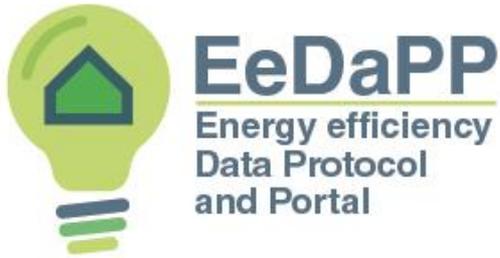
The way forward

- ▶ Development of a European energy efficient mortgage market



Vincent Mahieu

vincent@hypoport.com



Energy Efficient Mortgage Initiative

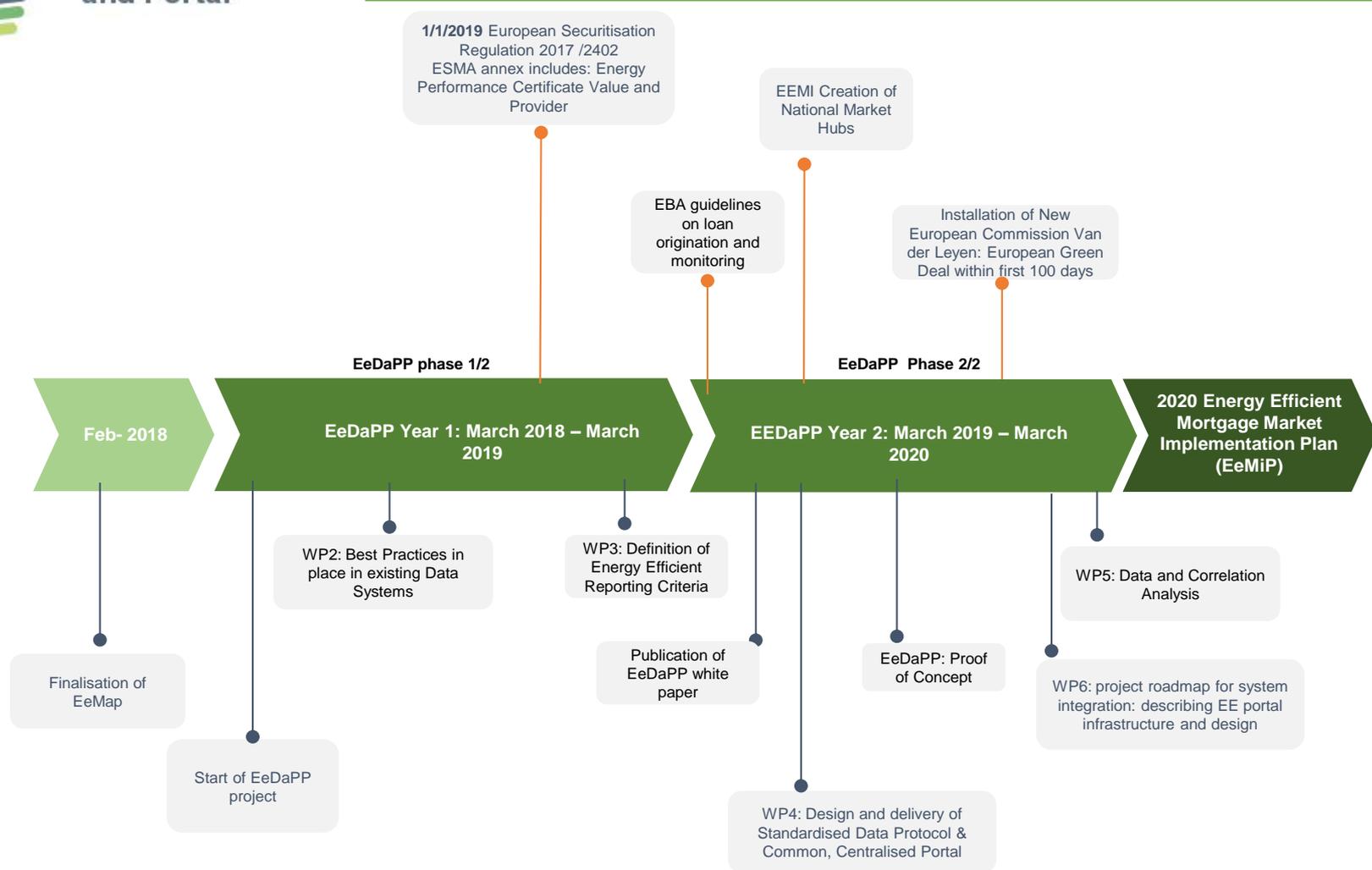
Energy Efficient Mortgages Action Plan (EeMAP)

EeMAP aims to create a **mortgage financing mechanism** through which property owners are incentivised to improve the energy efficiency of their building or acquire an already energy efficient property by way of favourable conditions linked to the mortgage. The cornerstone of the initiative is the assumption that energy efficiency has a risk mitigation effect for banks as a result of the impact on a borrower's ability to service his/her loan and on the value of the property, a correlation which the EeMAP Initiative is currently working to substantiate.

Energy Efficient Data Portal & Protocol Initiative (EeDaPP)

EeDaPP is intended to support the energy efficient mortgage financing mechanism by delivering a market-led protocol which facilitates the large-scale gathering and processing of data relating to energy efficient mortgage assets, via a standardised reporting template. In the long term, the data will be accessed by way of a common, centralised portal, allowing for continuous tracking of the performance of the energy efficient mortgage assets, thereby also facilitating the tagging of such assets for the purposes of **energy efficient bond issuance**.

EeDaPP Overview of timeline and deliverable



EeDaPP: A practical & technical approach

EeDaPP Pilot Phase –feedback

Together with pilot phase banks we have been liaising closely with many European Banks. These talks have included:

Reflecting on the White Paper and EE criteria

- **Ambition**
- **scope**

Discussions on technical challenges and feasibility

- Addressing **concerns** with respect to IT infrastructure investments
- Alignment current and forthcoming financial and privacy **regulation**

Availability

- of energy efficiency data
- Energy labels
- Data quality and availability issues

EeDaPP Working Packages

WP1: Project Management

WP2: Identify Best Practices in place within existing data systems → a pre-analysis on basic assumptions, project scope and high level technical components

WP3: definition of energy efficient reporting criteria → EE criteria & white paper

WP4: design and delivery of standardised data protocol & common, central portal → describing feedback pilot phase and building blocks for the portal.

WP5: data and correlation analysis → data analysis

WP6: Creation of roadmap for system integration → architecture for the portal

WP7: Project dissemination

Green Deal branded as ‘hallmark’ of new European Commission

By Frédéric Simon and Sam Morgan | EURACTIV.com

Sep 11, 2019



Frans Timmermans in Milan, 24 May 2019. [Photo: EPA-EFE/DANIEL DAL ZENNARO]

Languages: Français | Deutsch



“I want the European Green Deal to become Europe’s hallmark,” said European Commission President-elect Ursula von der Leyen, as she tasked her second-in-command with overseeing Europe’s goal of achieving climate neutrality by mid-century.

“At the heart” of von der Leyen’s new Commission “is our commitment to becoming the world’s first climate-neutral continent,” the incoming Commission chief said on Tuesday (10 September) as she presented her team and their respective portfolios.

Some items in Von der Leyen’s Mission Statement

- Von der Leyen states: “Europe follows the **energy-efficiency-first principle across the board** and boosting the uptake of renewable energy deployment.”
- “Coordinate the work on the **Sustainable Europe Investment Plan**, which should unlock **€1 trillion of climate-related investment** over the next decade”
- **“I want the European Green Deal to become Europe’s hallmark,”** said European Commission President-elect Ursula von der Leyen, as she tasked her second-in-command with overseeing Europe’s goal of achieving climate neutrality by mid-century.
- **“At the heart of it is our commitment to becoming the world’s first climate-neutral continent. It will require collective ambition, political leadership and a just transition for the most affected.”**
- **“I want Europe to be the front-runner. I want Europe to be the exporter of knowledge, technologies and best practice”** the new Commission chief said, introducing Timmermans as her second-in-command.
- The European Investment Bank, helping to turn parts of it into **Europe’s climate bank**. By 2025, **half of its total financing should be dedicated to climate investment.**

Europe seems to embrace Energy Efficiency

General adaptation of Energy Efficiency by both politicians and regulators.

- Interesting movement across Europe where energy efficient as a topic is becoming a **mainstream agenda item**
- Many explicit references in the new mission statement of the **Von der Leyen European Commission**
- **Christine Lagarde** sees climate change as “**mission critical**” for the ECB and **opens the door to EU taxonomy-based asset purchases programs**
- **Christine Lagarde** suggested that the **ECB**, which she is set to lead later this year, could **apply green** criteria to its **asset purchase program**
- ECB stands to deviate from “market neutrality” in future bond and asset purchase programs
- ECB has already purchased green bonds under both the CSPP and the public sector purchase programme (PSPP)
- “The ECB is supporting the development of such a taxonomy,” Lagarde said. **“Once it is agreed, in my view it will facilitate the incorporation of environmental considerations in central bank portfolios.”**
- The new securitisation regulation ESMA reporting annexes have incorporated energy performance certificates in both:
 - annex2_underlying_exposures-residential_real_estate
 - annex5_underlying_exposures-automobile

Lagarde promises to paint the ECB green

The Frenchwoman also signals she'll continue Mario Draghi's policy of stimulating the economy.

By **BJARKE SMITH-MEYER** | 8/29/19, 7:10 PM CET | Updated 9/4/19, 3:20 PM CET



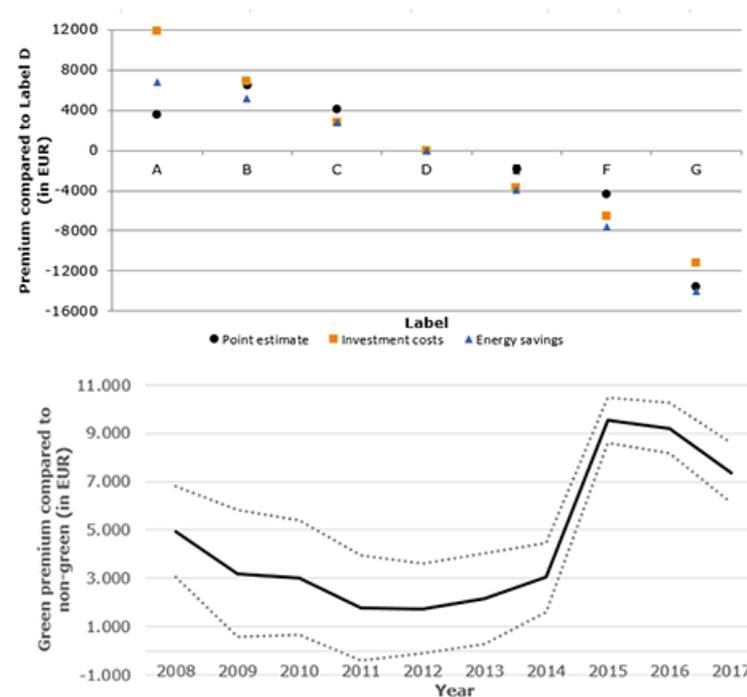
Dutch central bank: Energy efficiency is factored in well in the Dutch housing market

General adaptation of Energy Efficiency by both politicians and regulators.

- The price difference between “green” homes (with energy labels A, B or C) and “non-green” homes can well be explained by the costs involved in making non-green dwellings sustainable. These findings follow from **research conducted by DNB**.
- The energy labels, which are now mandatory under European legislation, help homebuyers to better factor in expected energy consumption.
- This encourages homesellers to make their houses more sustainable.
- This allows homebuyers to better factor in the expected energy consumption when buying a house. Green homes will then be sold with an added premium.
- Such a premium should properly reflect the costs of the investment and the value of the expected energy savings.
- The premium for green homes has significantly increased since 2015

Figure 1: Estimated premiums per label set off against the investment costs and discounted energy savings

Figure 1 shows the absolute value of the estimated premium of the relevant label against label D (in black) for the entire sample. The figure also shows the investment costs required to attain a specific label (in yellow), taking label D as a starting point and the discounted value of the expected energy savings of the relevant label set off against a D label (in blue).



Regulation and Reporting: implementation of Energy Efficient Data in ESMA Securitisation regulation and HTT

Investor Report: 1 April 2019 - 30 April 2019



18. Energy Efficiency Label

Description	Aggregate Outstanding Amount	% of Total Pool	% in NL	Nr of Loans	% of Total	Weighted Average Coupon	Weighted Average Maturity (year)	Weighted Average CLTMW
Label A	304.113.251,74	1,90%	1,72%	1.683	2,21%	2,92%	21,14	72,46%
Label B	806.000.430,34	2,48%	2,52%	1.907	2,59%	2,89%	20,70	72,08%
Label C	1.892.011.351,54	12,70%	10,53%	5.900	13,02%	3,00%	21,72	70,05%
Label D	1.030.260.247,30	6,51%	6,57%	5.563	7,54%	3,10%	20,51	71,03%
Label E	5.876.708.929,99	37,24%	38,76%	27.378	35,98%	2,50%	21,00	66,44%
Label F	2.263.468.952,12	14,60%	13,53%	10.394	13,52%	2,92%	22,32	67,14%
Label G	3.802.288.146,37	24,39%	24,57%	18.634	24,74%	3,09%	21,16	66,79%
Energy Efficiency Label not known								
Total	15.692.000.625,90	100,00%	100,00%	76.088	100,00%	2,99%	21,53	69,00%

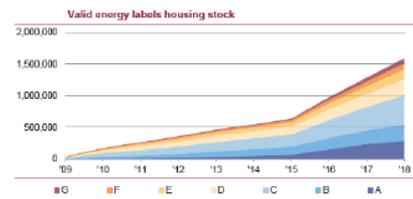


Figure
Registered energy labels stock of owner-occupied homes in the Netherlands
Source: Calcasa

Increased momentum in European Regulatory Reporting

- **ESMA Securitisation Regulation:** The Portal can give a quick visual insight of the key performance indicators
- **EBA guidelines on loan origination and monitoring :** In particular, the EBA proposes that environmental, social and governance (ESG) factors be included in risk management policies, credit risk policies and procedures. This most recent policy development underlines the relevance and timeliness of the Energy Efficient Mortgages Initiative.
- **Covered Bond:** Possible implementation of Energy Efficient information in forthcoming HTT by Covered Bond Label.

TEMPLATE CATEGORY	SECTION	FIELD CODE	FIELD NAME	CONTENT TO REPORT	ND1-ND4 allowed?	ND5 allowed?	FORMAT
ANNEX 2: RRE	Collateral information section	RREC10	Energy Performance Certificate Value	The energy performance certificate value of the collateral at the time of origination: A (EPCA) B (EPCB) C (EPCD) D (EPCC) E (EPCE) F (EPCF) G (EPCG) Other (OTHR)	YES	YES	{LIST}
ANNEX 2: RRE	Collateral information section	RREC11	Energy Performance Certificate Provider Name	Enter the full legal name of the energy performance certificate provider. The name entered must match the name associated with the LEI in the Global Legal Entity Foundation (GLEIF) database.	YES	YES	{ALPHANUM-100}

Proof of Concept – Energy Efficient Portal

Currently we have established a proof of concept for an energy efficient portal. The Portal is a work in progress that is established on our joint experience on loanlevel, HTT/NTT and regulatory reporting standards.

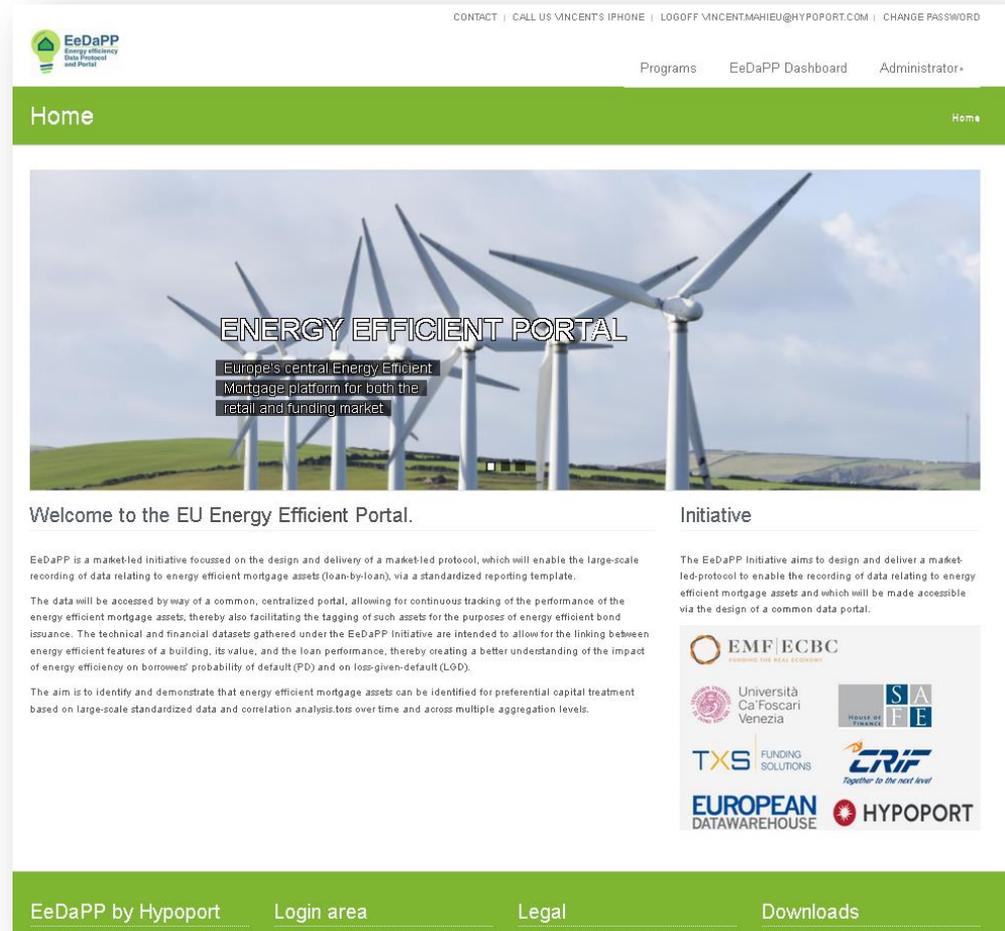
It reuses much of the proven technology and best practices we have used for www.LoanbyLoan.eu.

Roadmap of functionality:

- Extensive User & Permission management on both user and group levels
- AES256 bit encryption and 2FA authentication protocol.
- GDPR-proof tooling (allowing to anonymize, encrypt or hash data fields).
- Dashboard and Analytics
- Customizable data room functionality

Utilizing:

- European based MS Azure cloud environment
- Microsoft PowerBI Analytics & Dashboard



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Programs EeDaPP Dashboard Administrator

Home Home

ENERGY EFFICIENT PORTAL
Europe's central Energy Efficient Mortgage platform for both the retail and funding market

Welcome to the EU Energy Efficient Portal.

Initiative

The EeDaPP Initiative aims to design and deliver a market-led-protocol to enable the recording of data relating to energy efficient mortgage assets (loan-by-loan), via a standardized reporting template.

The data will be accessed by way of a common, centralized portal, allowing for continuous tracking of the performance of the energy efficient mortgage assets, thereby also facilitating the tagging of such assets for the purposes of energy efficient bond issuance. The technical and financial datasets gathered under the EeDaPP Initiative are intended to allow for the linking between energy efficient features of a building, its value, and the loan performance, thereby creating a better understanding of the impact of energy efficiency on borrowers' probability of default (PD) and on loss-given-default (LGD).

The aim is to identify and demonstrate that energy efficient mortgage assets can be identified for preferential capital treatment based on large-scale standardized data and correlation analysis over time and across multiple aggregation levels.

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EeDaPP by Hypoport Login area Legal Downloads

Proof of Concept – Energy Efficient Portal

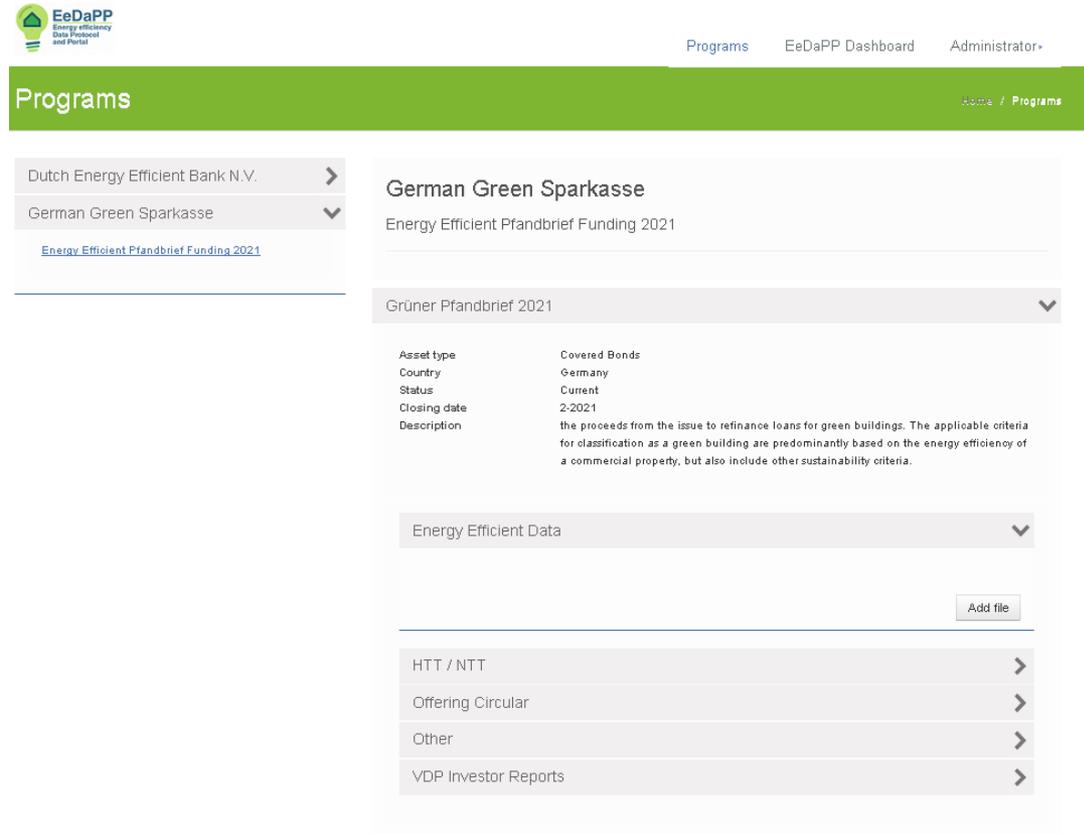
Front End

The front end of the portal gives an overview of the funding of the program (whole loan, covered bond, securitisation, etc.).

- Data can be uploaded by the user
- Permissions and activities are logged for audit purposes

It serves as a data hub that is customisable:

- Folders can be created
- Data can be exchanged
- Permissions can be set on the folders



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Programs EeDaPP Dashboard Administrator

Programs

Home / Programs

- Dutch Energy Efficient Bank N.V. >
- German Green Sparkasse ▼
 - [Energy Efficient Pfandbrief Funding 2021](#)

German Green Sparkasse

Energy Efficient Pfandbrief Funding 2021

Grüner Pfandbrief 2021 ▼

Asset type	Covered Bonds
Country	Germany
Status	Current
Closing date	2-2021
Description	the proceeds from the issue to refinance loans for green buildings. The applicable criteria for classification as a green building are predominantly based on the energy efficiency of a commercial property, but also include other sustainability criteria.

Energy Efficient Data ▼

Add file

- HTT / NTT >
- Offering Circular >
- Other >
- VDP Investor Reports >

Proof of Concept: Energy Efficient Portal – data insights

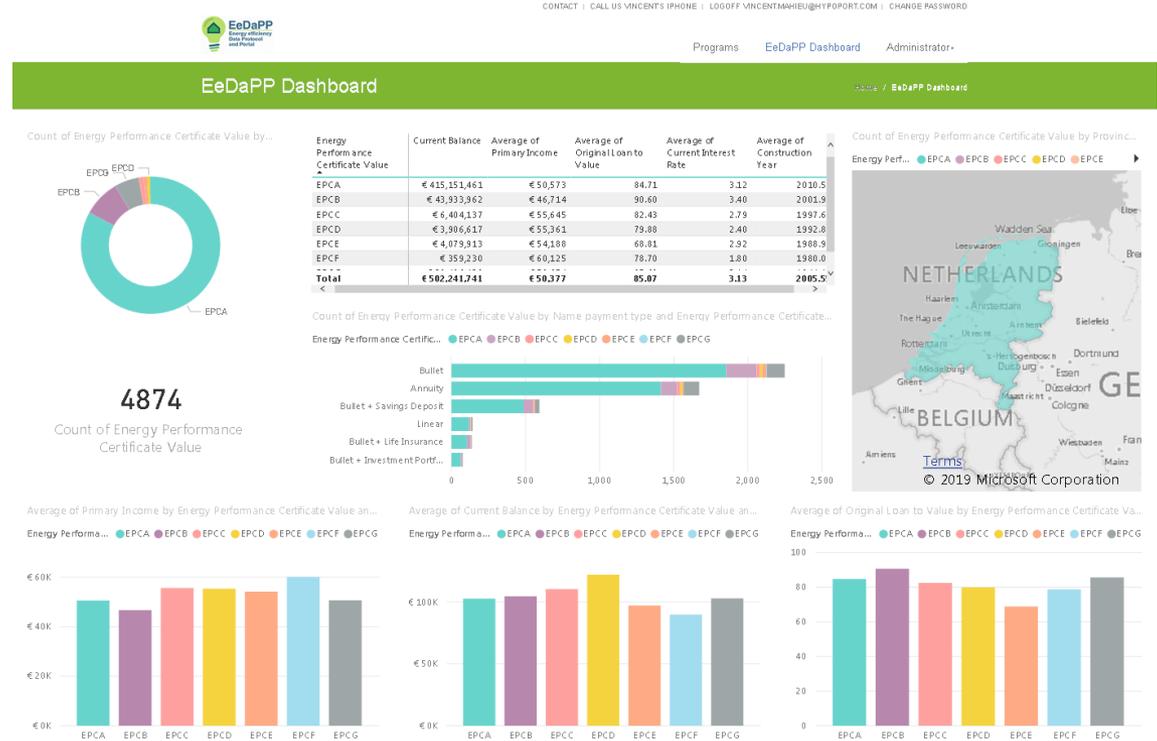
Proof of Concept – Energy Efficient Portal

Back End

The back end of the portal gives an overview of the portfolio into energy efficient metrics. In the example here you see a Dutch portfolio with approx. ~5000 Energy Efficient mortgages.

The portal will allow users to:

- Get insight into green effectiveness
- Get an overview of the data gap
- Benchmark data
- Facilitate data for usage with sustainable option providers (i.e. client bond initiative)



EeDaPP Consortium members can help in facilitating EPC data in your jurisdiction.

Energy Label: The Energy Performance Certificates (hereafter EPCs) are the most dominant source of energy information regarding the European building's stock. EPC's are an increasingly effective metric to capture energy performance and the impact of building policies.

Hypoport, TXS, Crif, EDW can assist in providing energy efficient data in your datawarehouse!

- Central governmental body
- Regional governmental body
- Central and regional governmental bodies
- Professional association
- Third party body
- Central governmental body and third party body





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- **For additional information on the Energy efficiency Data Protocol and Portal Initiative**

➤ Visit:

<http://www.energyefficientmortgages.eu/>

➤ Contact:

Luca Bertalot

EeDaPP Project Coordinator

Secretary General of the EMF-ECBC

lbartalot@hypo.org

