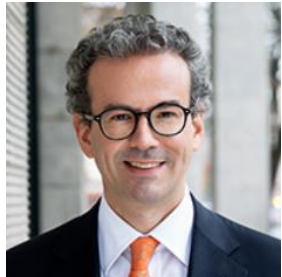


# **SPRING WORKSHOP SERIES**

**ITALY – 23 MARCH 2022**



## ON TODAY'S CALL



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# AGENDA

## WELCOME AND INTRODUCTION

- Marco Angheben, European DataWarehouse

## LATEST SOLUTIONS

- Marco Angheben , European Datawarehouse

## SECURITISATION REGULATION REPORTING CONTRACTUAL REQUIREMENTS IN THE EU AND UK

- Pietro Bellone, Allen & Overy

## LATEST DEVELOPMENTS ON STS VERIFICATION

- Michael Osswald, SVI

## NEW EDITOR FEATURES AND ESMA DATA QUALITY RULES

- Gianluca Ginelli, European DataWarehouse

## THE IMPORTANCE OF DATA

- Anne-Sophie Spirito, Moody's Investors Service

## SUSTAINABLE FINANCE

- Andrea Bedin, European DataWarehouse

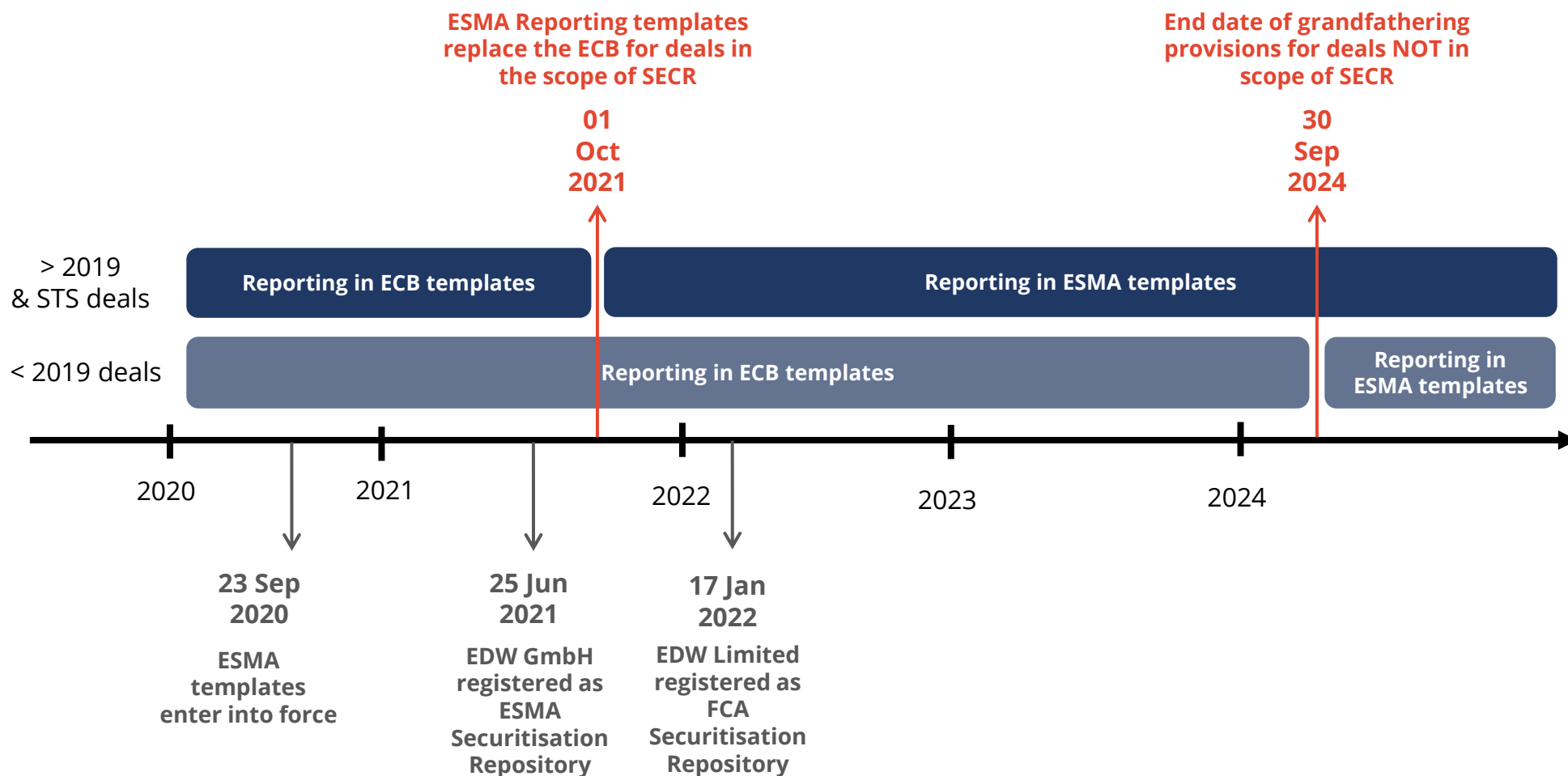
# **WELCOME AND INTRODUCTION**

**MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE**

# **LATEST SOLUTIONS**

**MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE**

# CHANGES TO THE EUROSISTEM'S LOAN-LEVEL DATA REQUIREMENTS



Source: Timeline is based on the information provided in the ECB [press release](#) as of 28 June 2021

# CURRENT DISCLOSURE REQUIREMENTS

Differences between public and private securitisations in EDITOR – Securitisation Repository solutions

ESMA/FCA Reporting Templates	Public	Private
Underlying Exposures	✓	✓
Investor Report	✓	✓
Inside Information/ Significant Event	✓	–

Disclosure requirements based on the RTS/ITS on operational standards for SR	Public Securitisation Repositories (SR)	Private (exempted from reporting to SR)
XML format	✓	✓
XML Schema checks	✓	–
ESMA/FCA Scoring	✓	–
Content checks (validation rules)	✓	–
ND Thresholds	✓	–

# NEW SECURITISATION NOTIFICATION TEMPLATE FROM 1 APRIL 2022

**Reporting frequency:** Please provide the information as per the date of **origination\***. No regular reporting or updates on changes are requested, except for any significant event following Article 7 (1) g) of SECR, affecting or likely to affect the features of transactions, particularly in relation to compliance with Articles 6 to 8 SECR. If so, please notify the ECB via CASPER, submitting also the updated template reflecting the significant events.

**Required data points:** Depending on the type and specificities of the transaction, not all data fields are required to be reported. For example, in case of a self-retained securitisation, there is no need to report further data points in the risk retention section. Upon selecting "Yes" for *Fully self-retained transaction*, the remainder of the Risk Retention section will be formatted in grey to indicate that the other cells do not need to be filled.

**Multi-seller pools:** In relation to shared pools/multi-seller pools, each originator should notify the pro-rata participation in the pool and all the required data fields. In case of transactions with original lender and potentially several interim originators and one final originator (i.e. exposures sold subsequently from one originator to the other), notification is expected from the final originator who securitises the exposures.

**Upload of attachments:** Please note that one file can be uploaded as an attachment in CASPER up to the maximum size permitted (currently 10MB). Thus, please either provide the written confirmation that the securitisation complies with Art. 6-8 and the assessment of its internal policies, processes and procedures in one document or include all documents in one zip file.

**Update of the template:** The notification template and these instructions may be subject to change from time to time as required. Please make sure to use the latest version of the template as available in CASPER when submitting a notification in CASPER.

\* The date on which the exposures were first securitised, which may be one of the following: the date of the first issuance of securities (traditional securitisations), the date of the credit protection agreement (synthetic securitisations), or the date on which the initial securitisation positions were created (ABCP transactions) or on which the asset-backed commercial paper was first issued (ABCP programmes). This is in line with Article 43(9) SECR.

Source: ECB [website](#)

Reporting entity
Banking group of reporting entity
Identifier of the securitisation
Unique identifier
Identifier assigned by Securitisation Repository
Type of transaction
Resecuritisation
Legitimate purpose for resecuritisations
Date of origination
Reference date of information
Status of STS
Status of SRT
Revolving exposures
Revolving securitisation
Unique identifier of corresponding ABCP Programme
Information on the credit enhancement (ABCP)
Liquidity line provided by the sponsor (Total in EUR)
Credit facility provided by the sponsor (Total in EUR)
Other support provided by the sponsor (Total in EUR)
Type of other support provided by the sponsor
Classification of the underlying exposures (ABCP)
Total number of transactions
NPE securitisation
Portfolio in the ramp-up phase
Final legal maturity
Nominal amount of the underlying securitised exposures
Total in EUR
Breakdown by currency:
Most relevant currency
2nd most relevant currency
3rd most relevant currency



# GUIDE ON THE NOTIFICATION OF SECURITISATION TRANSACTIONS

## Timeliness of the notification

It is recommended that new transactions be notified to the ECB **no later than one month from the date of origination**.<sup>10</sup>

The ECB foresees a phase-in implementation until [1 October 2022] for those SIs unable to properly notify the ECB from [1 April 2022]. During the phase-in period, SIs are expected to finalise set-ups and systems to be able to submit notifications in line with the expectations of the Guide.



**6-month 'phase-in' period**  
**1 April – 1 October 2022**

## Information to be provided at origination

Originators or sponsors are expected to provide the ECB with the information relating to each new transaction at origination as listed in the Annex, which is divided into the following four sections:

- Section A (key transaction information);
- Section B (information on securitised exposures);
- Section C (information on securitisation positions);
- Section D (compliance with Articles 6 to 8 SECR).

## Information to be provided during the life of the transaction

The requirements of Articles 6 to 8 SECR have to be fulfilled on a continuous basis. Originators or sponsors are recommended to notify the ECB without undue delay of any significant event affecting or likely to affect the features of transactions during the life of the transaction, particularly in relation to compliance with Articles 6 to 8 SECR.

# FCA XML SCHEMA UPDATE

## End of the Temporary Transitional Power

On 1<sup>st</sup> April 2022 the UK TTP comes to an end and the UK transitions from the EU Securitisation Regulation to the UK Securitisation Regulation.

## FCA XML Schema Update

Ahead of this transition the FCA have published updated UK schemas to their Securitisations webpage, with the key changes being the removal of EU names and references. The following two updates have now been made on the FCA Securitisation page:

- Update with new schemas/ validation rules and amended worksheets; and
- Update to the validation rules for XML reporting of public securitisations.

## EDW CSV2XML Converter Tool

The EDW Converter tool will be updated to support the new schema on the evening of the 31<sup>st</sup> March 2022. Clients won't need to make any changes and can continue to use the ESMA CSV templates after the change for most relevant asset classes (RMBS / Auto ABS / Consumer ABS / Credit Card ABS).

# REPORTING SOLUTIONS UNDER ESMA AND FCA REGIMES

Base Scenario 1	Alternative Scenario 2	Alternative Scenario 3
<p>a) <b>Private ABS transaction</b>, as defined in Article 7.2, subparagraph 3 of Regulation (EU) 2017/2402 (<i>securitisations where no prospectus has to be drawn up in compliance with Directive 2003/71/EC, repealed by Regulation (EU) 2017/1129</i>).</p> <p>b) Listing: in the EU</p> <p>c) <b>Reporting obligation/s: ESMA disclosure regime only</b> (Article 7.1 of Regulation (EU) 2017/2402 along with the corresponding developing regulatory and implementing technical standards adopted by the European Commission)</p> <p>d) Dedicated website solution: <b>EDITOR GmbH</b> only.</p> <p>e) Costs: Annual fee of €7k starting from the second year of the deal creation (up to 30 June 2022)</p>	<p>a) <b>Private ABS transaction</b>, as defined in Article 7.2, subparagraph 3 of Regulation (EU) 2017/2402 (<i>securitisations where no prospectus has to be drawn up in compliance with Directive 2003/71/EC, repealed by Regulation (EU) 2017/1129</i>).</p> <p>b) Listing: in the EU</p> <p>c) <b>Reporting obligation/s: ESMA disclosure regime only</b> (Article 7.1 of Regulation (EU) 2017/2402 along with corresponding developing regulatory and implementing technical standards adopted by the European Commission), <b>plus the delta with regard to the FCA disclosure regime</b> (Article 7.1 of the UK Securitisation Regulation along with corresponding developing technical standards made jointly by the FCA and the PRA) <b>based on investor request</b> (to enable the performance of the due-diligence requirements for institutional investors prescribed in Article 5 of the UK Securitisation Regulation).</p> <p>d) Dedicated website solution: <b>EDITOR GmbH</b> only, under which an <b>additional section</b> is created under “Documentation” <b>for the diverging UK disclosure regime</b>.</p> <p>e) Costs: Annual fee of €7k starting from the second year of the deal creation (up to 30 June 2022)</p>	<p>a) <b>Private ABS transaction</b>, as defined in Article 7.2, subparagraph 3 of Regulation (EU) 2017/2402 (<i>securitisations where no prospectus has to be drawn up in compliance with Directive 2003/71/EC, repealed by Regulation (EU) 2017/1129</i>).</p> <p>b) Listing: in the EU</p> <p>c) <b>Reporting obligation/s: ESMA disclosure regime only</b> (Article 7.1 of Regulation (EU) 2017/2402 along with the corresponding developing regulatory and implementing technical standards adopted by the European Commission) <b>plus complete FCA disclosure regime</b> (Article 7.1 of the UK Securitisation Regulation along with the corresponding developing technical standards made jointly by the FCA and the PRA) <b>based on investor request</b> (to enable the performance of the due-diligence requirements for institutional investors prescribed in Article 5 of the UK Securitisation Regulation).</p> <p>d) Dedicated website: <b>EDITOR GmbH plus EDITOR Ltd. (dual reporting for both documentation and LLD)</b>.</p> <p>e) Costs: Annual fee of €7k starting from the second year of the deal creation (up to 30 June 2022)</p>

# **SECURITISATION REGULATION REPORTING CONTRACTUAL REQUIREMENTS IN THE EU AND UK**

**PIETRO BELLONE, ALLEN & OVERY**

## DUAL COMPLIANCE: DIRECT APPLICATION (BY LAW) / INDIRECT APPLICATION (BY CONTRACT)

- ❑ Securitisations involving EU-sell side parties only trigger application of the EU Securitisation Regulation by law
- ❑ However, if UK investors are targeted, UK Securitisation Regulation will also have to be considered as UK investors need to make sure that they comply with due diligence and transparency requirements
- ❑ As a matter of practice, indirect application of UK Securitisation Regulation in EU deals is achieved contractually in different ways

## DUAL COMPLIANCE: INDIRECT APPLICATION (BY CONTRACT)

- ❑ In some EU deals the parties have agreed to provide only EU reporting, but the originator has undertaken to do its best efforts to provide any further reasonable information in its possession that may be required by UK investors for the purposes of their due diligence pursuant to article 5 of the UK Securitisation Regulation
- ❑ In others, compliance with UK Securitisation Regulation has been excluded at all
- ❑ In a few deals, compliance with UK Securitisation Regulation is ensured at closing
- ❑ T&Cs may provide for additional modification provisions which allow for changes of the approach throughout the life of the transaction if needed

## DUAL COMPLIANCE: INDIRECT APPLICATION (BY CONTRACT) / END OF THE TRANSITIONAL PERIOD

- ❑ With the end of the Brexit transitional period on 31 March 2022 and the publication of FCA templates, compliance on day 1 becomes almost meaningless (except with respect to any potential future change)
- ❑ In light of the above, some EU deals start providing for compliance on an on-going basis
- ❑ On-going compliance has not practical implications for some asset types in respect of which EU and UK loan-by-loan template information are identical, but it does have for others
- ❑ Market practice is still evolving and it remains a space to watch

# **LATEST DEVELOPMENTS ON STS VERIFICATION**

**MICHAEL OSSWALD, SVI**





# THE STS VERIFICATION PROCESS – THE STRUCTURED PATH TO YOUR SUCCESS.

## Latest Developments on STS

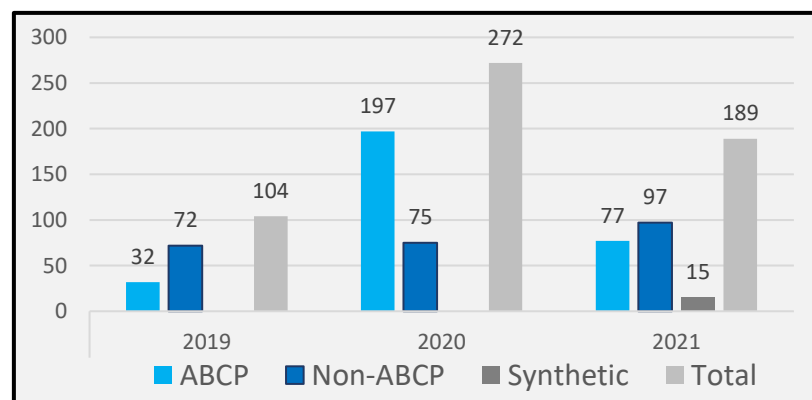
Michael Osswald

STS Verification International GmbH ("SVI")

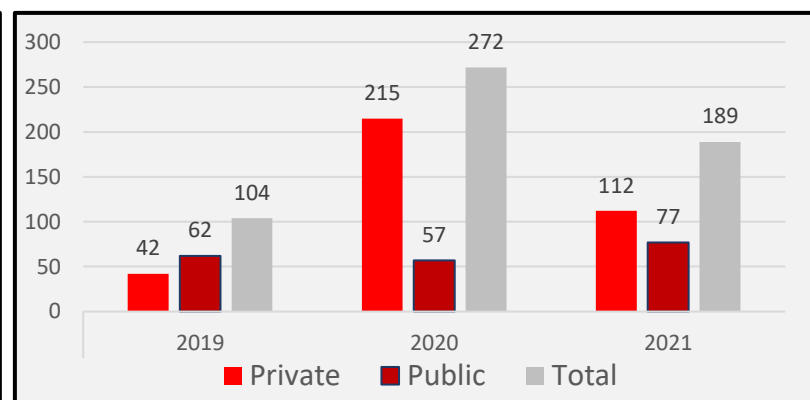
European Data Warehouse Italian Virtual Workshop, 23 March 2022

## DEVELOPMENT OF THE MARKET FOR STS TRANSACTIONS (2019-2021)

**Distribution of all STS-notified Securitisations by Transaction Type\*)**



**Distribution of all STS-notified Securitisations by public vs private\*)**

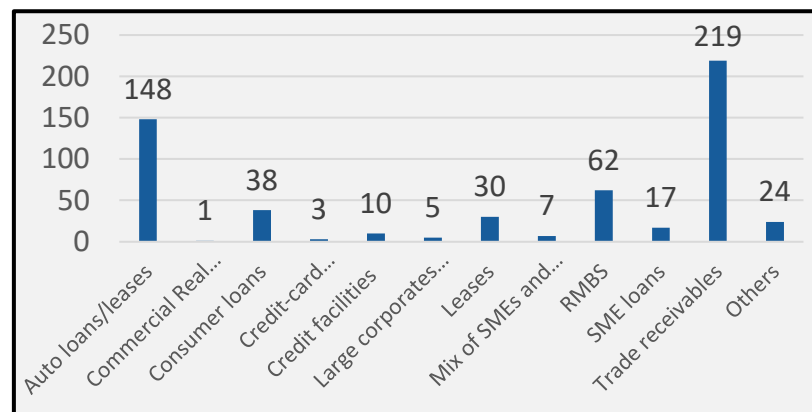


\*) Period 1.1.2019 – 31.12.2021; Source: ESMA Website, SVI

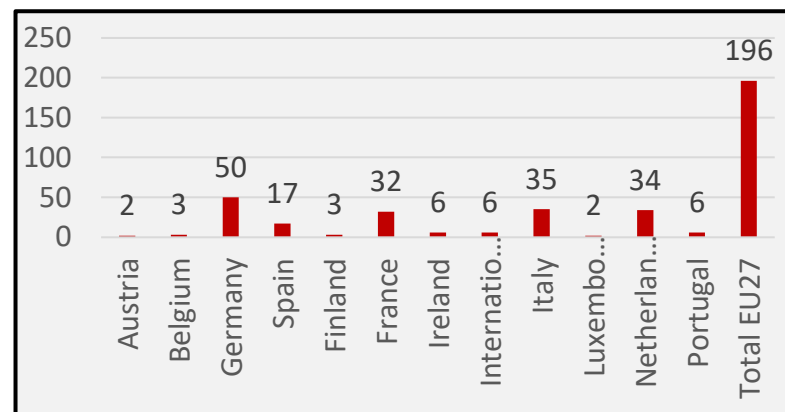
- Since the introduction of the STS-segment, 565 securitisations have been notified as STS-compliant (244 non-ABCP vs. 306 ABCP vs. 15 Synthetic, 196 public vs. 369 private transactions)
- STS-compliant transactions can be notified to ESMA as either “public” or “private” transactions, with resulting vastly different level of disclosure

## DEVELOPMENT OF THE MARKET FOR STS TRANSACTIONS (2019-2021) (CONTINUED)

**Distribution of all STS-notified Securitisations by Asset Class\*)**



**Distribution of public STS-notified Securitisations by Jurisdiction\*)**

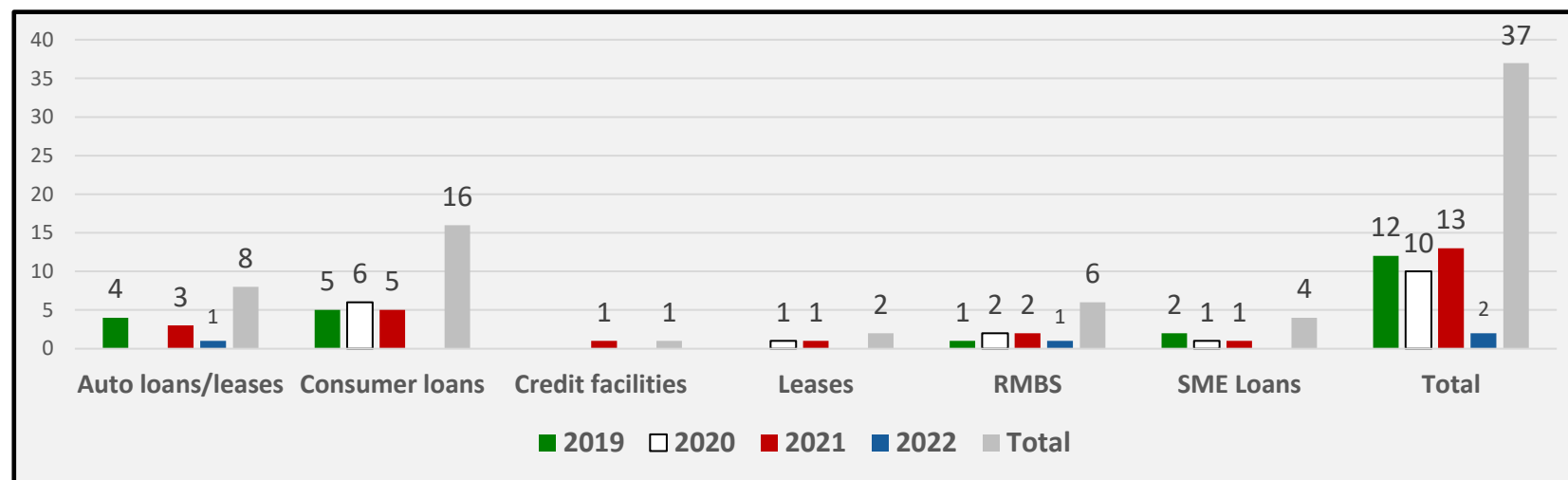


\*) Period 1.1.2019 – 31.12.2021; Source: ESMA Website, SVI

- The categorisation according to asset classes reflects the various asset types as proposed by the STS notification template provided by ESMA for traditional and synthetic securitisations, respectively
- Following Brexit, more than 80 UK securitisations have been removed from the ESMA list of STS-notified transactions in a „clean-up exercise“ at the end of 2020/early 2021

## DEVELOPMENT OF THE MARKET FOR STS TRANSACTIONS (2019-2021) (CONTINUED)

### Distribution of Italian public STS-notified Securitisations by Asset Class<sup>\*)</sup>



<sup>\*)</sup> Period 1.1.2019 – 14.03.2022; Source: ESMA Website, SVI

- The main Asset Classes for the 37 STS-notified public Italian non-ABCP securitisations are consumer loans, auto loans/leases and RMBS. There is no public information available on ABCP and synthetic securitisations.
- Our database indicates that during the same period another 25 Italian non-ABCP securitisations have not been STS-notified. The main reasons for this are that they either consist of asset classes that are typically not eligible for STS (such as most CMBS) or are retained transactions that are used by the originator to obtain funding from ECB where STS is currently not a requirement.

# SUSTAINABLE SECURITISATION

## ■ Initial Securitisation Regulation (as of 12 Dec 2017):

- ❖ Since the inception of the STS-segment, the transparency criteria for non-ABCP securitisations have included the requirement to publish environmental performance data of the assets financed by residential mortgage loans and auto loans & leases
- ❖ Proviso that such information is available to the originator and captured in its IT systems

## ■ Amended Securitisation Regulation (as of 31 March 2021):

- ❖ Art. 22 (4) and Art. 26d (4): Originators may alternatively decide to publish „the available information related to the principal adverse impacts of the assets financed by the underlying exposures on sustainability factors“. At the same time, the European Supervisory Authorities shall develop an RTS on the content, methodologies and presentation of the above mentioned information, in respect of the sustainability indicators in relation to adverse impacts on the climate and other ESG-related adverse impacts (currently work-in-progress).
- ❖ Art. 45a: The ESAs shall, by 1 November 2021, publish a report on the development of a sustainable securitisation framework. The EU Commission shall submit such report together with the report on the functioning of the Securitisation Regulation as per Article 46 to the European Parliament and to the Council, in order to prepare a „specific sustainable securitisation framework“ (see next slide).

## SUSTAINABLE SECURITIZATION (CONTINUED)

### ■ State of Play regarding the Sustainable Securitisation framework (as per EBA report):

- ❖ **Interaction with STS:** serve different purposes, but synergies are clearly recognisable
- ❖ **Proposed European Green Bond Standard as „platform“ also for green securitisations:**  
Aims to create a common standard for all fixed income products, but amendments necessary to capture the specifics of securitisations:
  - use of proceeds approach at the level of the originator rather than SPV to avoid that the securitised portfolio needs to be 100% green and enable the originator to use the proceeds to finance green EU taxonomy-compliant investments
  - Additional disclosures of the environmental performance of the underlying assets to provide investors an insight on the green vs. brown composition of the securitised portfolio
- ❖ **Specific „green securitisation“ label:** possibly at a later stage for true sale securitisations; additional thoughts required for synthetic securitisations

### ■ The concept of the External Reviewer as crucial element of the proposed European Green Bond Standard:

- ❖ **Authorisation & supervision:** by ESMA, open to both EU and third-country domiciled entities
- ❖ **Main tasks:**
  - Pre-issuance review of the European green factsheet detailing (taxonomy-compliant) use of proceeds, environmental strategy of the issuer and other aspects of the bond issuance
  - Post-issuance review of the (use of proceeds) allocation reports (until bond maturity)

# **NEW EDITOR FEATURES**

**GIANLUCA GINELLI, EUROPEAN DATAWAREHOUSE**

# REPORTING ENTITY

Reporting Entity is derived from Securitisation Identifier

## Create Deal

Ensure all details below are correct before confirming new deal.

Data Owner	European DataWarehouse GmbH
Data Provider	European DataWarehouse GmbH
Reporting Entity LEI	529900IUR3CZBV87LI37
Reporting Entity Name	European DataWarehouse GmbH
Securitization Identifier	529900IUR3CZBV87LI37N202245

 Edit Deal Cancel Confirm



# ADD AND VISUALISE PREFERRED DEALS

Stay up to date with recent submissions and new document uploads using the MyPortfolio tool in EDITOR

- Via the EDITOR “Home” tab, create a personal portfolio and add specific deals based on the Securitisation ID, ISIN, or EDCode.
- Select the type of notification you want to receive:
  - ✓ New ESMA uploads
  - ✓ New ECB uploads
  - ✓ Documentation Changes
- Select the frequency of the notifications: Daily, Monthly, or Quarterly.

## My Portfolios

[View](#)[Create](#)

Portfolio Name

Add (Only one of the below Securitisation ID / ISIN / EDCode can be selected in a portfolio)

Subscribe to Email Notifications

☐ New ESMA uploads☐ New ECB uploads☐ Documentation Changes

Frequency

# COMPLIANCE WITH ARTICLE 5 OF THE SECURITISATION REGULATION

Get key transaction information in a standardised format with EDW Monitoring Report Solution

- Supports institutional investors in carrying out their due diligence assessment to comply with ongoing monitoring requirements under Article 5 of the Securitisation Regulation
- Contains a transaction summary with the most important information for a selected deal, such as principal balance, average LTV ratio, risk retention method, and ISIN-level data
- Allows in-depth insights on the pool of underlying assets, retrieved directly from EDW's database
- Currently available for RMBS and Auto asset classes - others soon to come

3. Prior to holding a securitisation position, an institutional investor, other than the originator, sponsor or original lender, shall carry out a due-diligence assessment which enables it to assess the risks involved. That assessment shall consider at least all of the following:

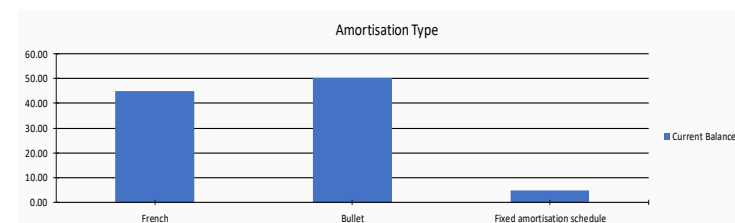
- (a) the risk characteristics of the individual securitisation position and of the underlying exposures;
- (b) all the structural features of the securitisation that can materially impact the performance of the securitisation position, including the contractual priorities of payment and priority of payment-related triggers, credit enhancements, liquidity enhancements, market value triggers, and transaction-specific definitions of default;

# MONITORING REPORT SOLUTION FOR INVESTOR DUE DILIGENCE

Comprehensive overview. Easy to read. Quick to download.

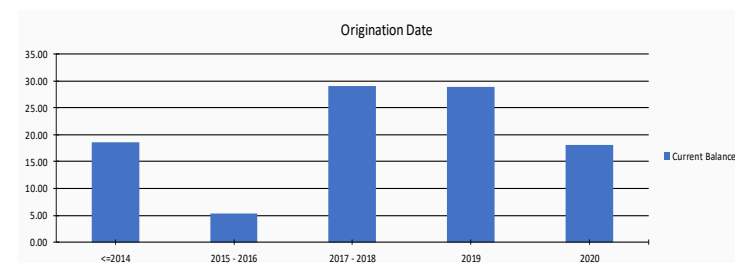
## Amortisation Type

	Current Balance	Current Balance %	Number of Loans
<b>French</b>	200,963,505.00	44.87	2,612
<b>Bullet</b>	225,812,671.00	50.42	2,541
<b>Fixed amortisation schedule</b>	21,131,294.00	4.72	240



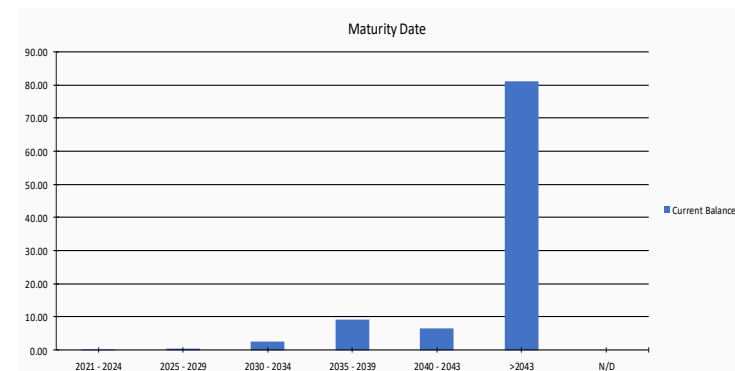
## Origination Date

	Current Balance	Current Balance %	Number of Loans
<b>&lt;=2014</b>	96,450,188.11	18.62	1,125
<b>2015 - 2016</b>	27,485,982.82	5.31	328
<b>2017 - 2018</b>	150,714,382.72	29.10	1,348
<b>2019</b>	149,883,468.21	28.94	1,341
<b>2020</b>	93,415,313.96	18.04	832



## Maturity Date

	Current Balance	Current Balance %	Number of Loans
<b>2021 - 2024</b>	64,727.22	0.01	8
<b>2025 - 2029</b>	2,274,397.25	0.45	59
<b>2030 - 2034</b>	13,146,238.84	2.58	194
<b>2035 - 2039</b>	46,352,073.62	9.11	538
<b>2040 - 2043</b>	33,746,284.18	6.63	366
<b>&gt;2043</b>	413,477,314.83	81.22	3,649
<b>N/D</b>	0	0	223



## WRITTEN CONFIRMATION

Reporting Entities (RE) are obliged to provide a written confirmation to the Securitisation Repository (SR) in line with the Regulatory Technical Standards (RTS) on operational standards for SRs.



### When should it be submitted?

Within 5 working days of the first issuance of securities for securitisations

Upon any material changes to documents uploaded to the SR

On an annual basis



### How should it be submitted?

Via upload to EDW's SR platform through EDITOR (web and SFTP) under item code – 13

As an email attachment to [enquiries@eurodw.eu](mailto:enquiries@eurodw.eu) with the subject:

"Written Confirmation - <SecID or DealName>"



### What about Due Diligence?

EDW shall review the written confirmation document to ensure it reflects the underlying documentation uploaded

EDW shall verify that the document has been signed by a legal representative or authorized person of the RE

\*Applicable to any public deal that has documents uploaded against items 3-9



### Which privacy measures are in place?

The written confirmation document will be stored in a secure location accessible only by EDW

Data users will be made aware that a written confirmation has been received and verified by EDW, but will not gain access to the actual document itself

# **UPDATE ON DATA QUALITY RULES**

**GIANLUCA GINELLI, EUROPEAN DATAWAREHOUSE**

# OVERVIEW OF EDW'S DATA QUALITY IMPROVEMENT PROCESSES

1	ESMA checks	Schema checks	<ul style="list-style-type: none"> <li>• Verification of file structure and the format of the data submitted</li> </ul>
		Validation rules	<ul style="list-style-type: none"> <li>• Rules that lead to a submission rejection</li> </ul>
		ESMA additional rules	<ul style="list-style-type: none"> <li>• Additional rules that need to be executed by the securitisation repository</li> </ul>

2	Optional EDW checks	Data Quality Plus	<ul style="list-style-type: none"> <li>• Rules developed by European DataWarehouse</li> </ul>
		Data Quality Score	<ul style="list-style-type: none"> <li>• A subset of Data Quality Plus rules used to calculate the DQS score</li> </ul>

# IDENTIFYING THE ADDITIONAL CHECKS DEVELOPED BY EDW

EDITOR's 'Download feedback' function allows issuers to view the failing checkIDs for the submitted ESMA templates

RuleId	RuleDesc	TemplateType	Status	Records
RREL63/UD/A/01	Prepayment Date (RREL63) later than Data Cut-Off Date (RREL6).	RMB	<b>RJCT</b>	5
RREL4/IS/A/01	[WARN] Original Obligor Identifier (RREL4) reports a different value than in the previous submission.	RMB	<b>WARN</b>	6
RREL37/IS/A/01	[WARN] Scheduled Principal Payment Frequency (RREL37) reports a different value than in the previous submission.	RMB	<b>WARN</b>	1
RREL48/CZ/A/01	[DQS] Interest Rate Cap (RREL48) equal to zero; for active loans.	RMB	<b>WARN</b>	5467
RREL49/IIC/A/01	[Data Quality Plus] Interest Rate Floor (RREL49) higher than Current Interest Rate (RREL43).	RMB	<b>WARN</b>	3320
RREL68/UHV/A/01	[Data Quality Plus] Number Of Days In Arrears (RREL68) greater than 180 when Account Status is not 'Defaulted' or 'Other' (RREL69 not in ('DFLT'; 'NDFT'; 'DTCR'; 'DADB'; 'OTHR')).	RMB	<b>WARN</b>	12
RREL69/OTH/A/01	[Data Quality Plus] Account Status equal to 'Other' (RREL69 = 'OTHR').	RMB	<b>WARN</b>	22
RREL73/ND5/A/01	[DQS] Allocated Losses (RREL73) reports ND5 when Sale Price (RREC21) or Date Of Sale (RREC20) are populated; for active loans.	RMB	<b>WARN</b>	6150
RREL8/IIC/A/01	[Data Quality Plus] Date Of Repurchase (RREL8) is populated when Account Status is not 'Repurchased' or 'OTHR' (RREL69 not in ('REBR'; 'REDF'; 'RERE'; 'RESS'; 'REOT'; 'OTHR')).	RMB	<b>WARN</b>	7421
RREL8/UD/A/02	[DQS] Date Of Repurchase (RREL8) earlier than 1980-01.	RMB	<b>WARN</b>	7443

- **RJCT** → Validation rules
- **[WARN]** → Additional ESMA rules
- **[DATA QUALITY PLUS]** → Rules developed by EDW to improve the quality of ESMA submissions
- **[DQS]** → A subset of Data Quality Plus rules used to calculate the DQS score

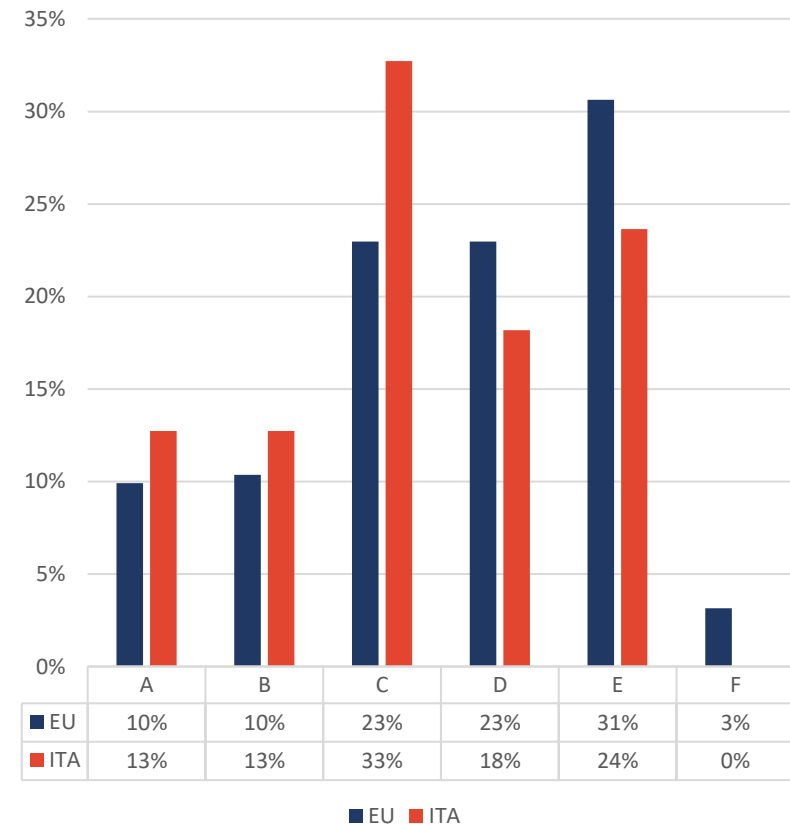
# DQS SCORE DISTRIBUTION FOR ESMA TEMPLATES

## Methodology

- Automated score based on DQS failed rules – subset of all EDW Data Quality Plus rules
- Objective and common approach for all deals, jurisdictions, and asset classes
- Based on the following formula:  $\frac{\sum(F_f)}{n \times MF}$  where:
  - $F_f$  represents a field that failed a rule;
  - $n$  is the total number of loans for each mandatory field;
  - $MF$  represents the number of unique fields per each asset class with at least one DQS check implemented.

DQS1 Score	Min. Fail Ratio	Max. Fail Ratio	Ratio
A	0.0000%	0.0001%	Up until 1 in a million
B	0.0001%	0.005%	Up until 5 in 100k
C	0.005%	0.1%	Up until 1 in a thousand
D	0.1%	1%	Up until 1 in a hundred
E	1%	4%	Up until 4 in a hundred
F	4%	100%	> 4 in a hundred

Distribution of DQS\_all jurisdictions



Note: data based on ESMA template submissions as of 10 March 2022 / Source: EDW calculations



# MAIN DRIVERS FOR ESMA DQS

	Field
1	Credit Impaired Obligor
2	Purchase Price
3	Current Principal Balance
4	Origination Channel
5	Date Of Restructuring
6	Redemption Date
7	Maturity Date
8	Original Term
9	Number Of Days In Arrears
10	Original Term

## SEVERAL KEY BENEFITS USING EDW'S EXTENDED TEMPLATES

### Easy-to-use format

*The data can be submitted in CSV-format*

### Time- and resource-saving

*No need to prepare a second loan tape for credit rating agencies*

### Free of charge

*The templates are available free of charge to EDITOR users*

### Restricted access only

*Templates provided via SFTP with access for selected parties only*



# A SEAMLESS UPLOAD PROCESS

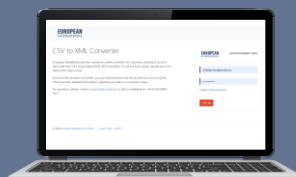
1

Upload EDW  
Extended Templates  
in CSV-format to the  
CSV2XML Converter



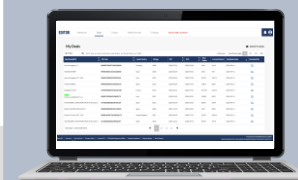
2

The ESMA fields are  
automatically  
converted into an  
XML file



3

The XML files can be  
published in EDITOR for  
ESMA-regulatory compliance



The EDW Extended  
Templates are automatically  
stored in CSV-format for  
credit rating agencies



4

# THE IMPORTANCE OF DATA

**ANNE-SOPHIE SPIRITO, MOODY'S INVESTORS SERVICE**



# The importance of data quality in Moody's credit analysis

# Agenda

1. Data quality is key for credit analysis
2. ESMA templates will raise data quality, but additional information is needed for credit analysis
3. Examples of information missing from ESMA's framework

# Data quality is key in structured finance transactions credit analysis

The evaluation of the characteristics of the underlying assets is a key element of our rating analysis

Hence our rating analysis relies, in part, on the quality of the data provided



## Data should provide an accurate representation of the asset characteristics

We rate transactions only if we have sufficient information from reliable sources

- » Data quality concerns may limit the rating assigned
- » Data quality concerns may result in an assessment that, for a given rating level, a higher credit enhancement is needed than would otherwise be the case



## Data quality is important through the life of the transactions and essential for our surveillance process

Accurate and complete information is needed at origination and during the life of the transactions

- » Data quality concerns can lead to surveillance rating committees
- » Consequences could be an increase in the credit enhancement needed for a particular rating, a rating downgrade or a rating withdrawal

# ESMA templates will raise data quality but additional information is needed for credit analysis

**Standardised disclosures ease credit risk analysis and benchmarking**

1

ESMA reporting requirements introduce consistent disclosures on collateral, performance, counterparties, triggers and bonds information

- » Increased transparency and comparability of data
  - All fields are mandatory
  - Consistent format
  - But certain aggregated data lack

**Ongoing access to data beyond the ESMA templates is needed**

2

It is crucial that servicers continue to provide missing information on a voluntary basis, to ease credit analysis

- » Missing loan by loan information:
  - Needed at closing and during the life of the transaction for revolving pools
- » Missing investor report information:
  - Key aggregated and cumulative asset information is needed to access consistent asset level performance indicators

**Securitisation repositories support data consistency and availability**

3

Securitisation repositories gather, maintain and make available transaction reports. This is increasing data quality.

- » Data repositories have the right to reject a report if too much information is missing



# Loan by loan fields missing from ESMA templates

Examples of CDQ loan-by-loan data outside of ESMA's framework

Additional loan-by-loan data	Details
Employer name	Employer name for personal loan secured by salary or pension assignment
Employer type	Employer type (e.g . public, private or public pension provider) for personal loan secured by salary or pension assignment
Borrower's age	Numeric
Insurance provider name and coverage	Name of insurance provider and insurance coverage description (for example, employment insurance or life insurance) for personal loan secured by salary or pension assignment
Delegazione di Pagamento or Cessione Del Quinto?	Specification of the relevant consumer loan product for personal loan secured by salary or pension assignment
TFR amount	Trattamento di Fine Rapporto (TFR) is severance pay accrued over the term of employment and paid to the employee upon termination of her/his employment.

# Examples of investor reports data missing from ESMA templates

Additional investor report data	Details
Aggregate principal outstanding balance	Current aggregate pool balance at the end of the reporting period; to be stated whether defaulted loans have been included or not
Cumulative additions	Since closing, cumulative amount of receivables added to the portfolio (for nonrevolving transactions, for example in case of tap issuance)
Cumulative and periodic replenishments	Cumulative (since closing) and periodic amount of receivables added to the portfolio during revolving period (for revolving transactions)
Cumulative substitutions	Since closing, cumulative amount of substituted loans
Cumulative and periodic prepayments	Cumulative (since closing) and periodic unscheduled principal payments received
90+ days delinquent loan amount	90+ days delinquent loan balance, excluding defaulted loans as relevant
Cumulative and periodic losses	Cumulative (since closing) and periodic loss amount
Cumulative recoveries	Since closing, cumulative amounts recovered from property sale and other sources
Gross cumulative and periodic defaults	Cumulative (since closing) and periodic defaulted loan amounts
Cumulative and periodic properties sold (loan amount)	Cumulative (since closing) and periodic loan amount relating to properties sold
Receiver of rent outstanding amount	Mainly for UK buy-to-let RMBS
Cumulative and outstanding amount of repossessions	Mainly for UK and Irish RMBS

Source: Moody's Investors Service

# Additional information for NPL transactions

## Examples of NPL data outside of ESMA's framework

Additional loan-by-loan data	Details
Secured loan	Flag showing whether the loan is secured or unsecured
Cash in court	Cash amount in court to be received
Property type	Type of property securing the loan
Additional investor report data	Details
Legal cost	Cumulative and periodic legal and procedure costs
Legal fees	Cumulative and periodic legal and procedure fees
Gross collections	Period gross collections before deduction of fees and costs
Net collections after costs	Period net collections after deduction of costs (or recovery expenses)
Net collections after fees and costs	Period net collections after deduction of fees and costs
Profitability	Profitability for fully closed and fully resolved debtors, as applicable (in percent)
Gross book value	Gross book value at the end of period
GACS cost due	Garanzia sulla Cartolarizzazione delle Sofferenze (GACS) costs in the period - accrued amount
GACS costs paid	GACS costs in the period - paid amount
Collection type	Collections by type of proceeds (e.g. discounted payoffs, note sales etc..)

Source: Moody's Investors Service

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+33 1 53 30 21 80



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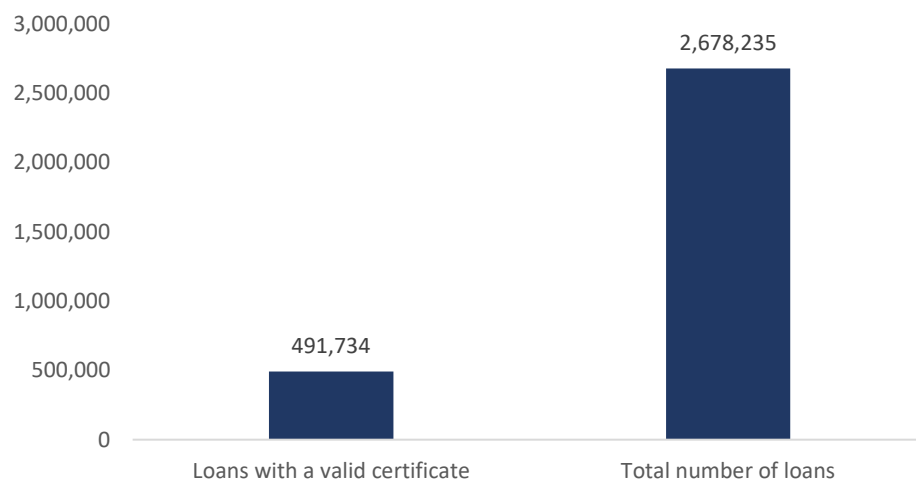
# **SUSTAINABLE FINANCE SOLUTIONS**

**ANDREA BEDIN, EUROPEAN DATAWAREHOUSE**

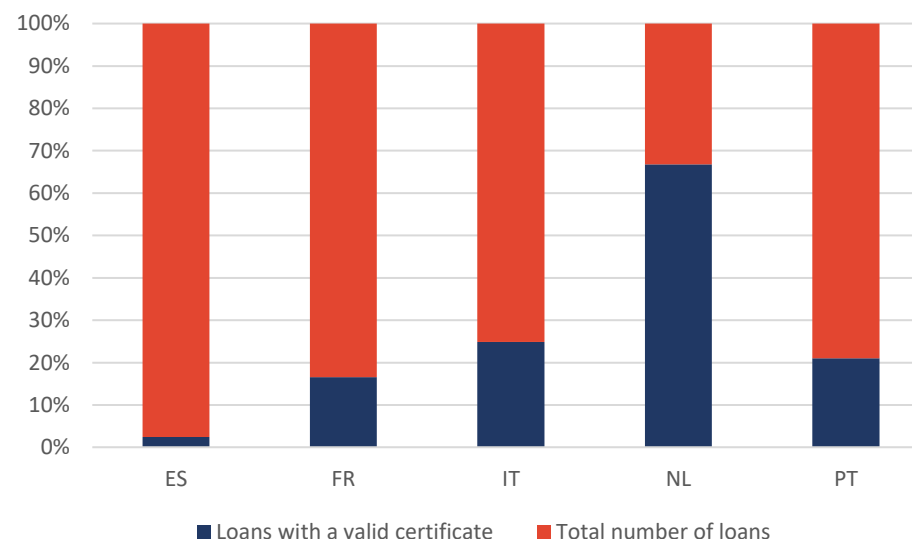
# ENERGY PERFORMANCE CERTIFICATES – HOW MUCH DATA IS AVAILABLE?

Still early days and most originators are finding it challenging to provide this data

## Total Mortgages

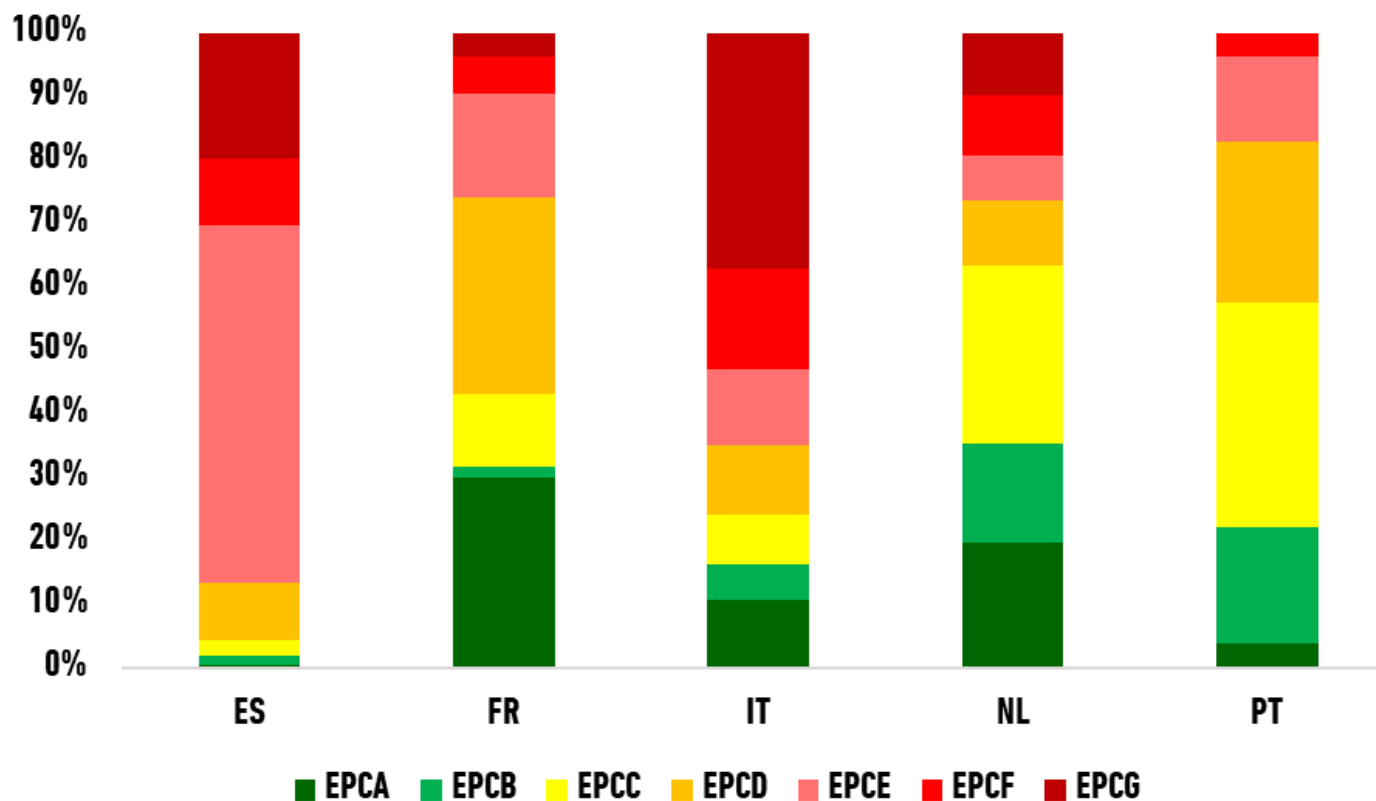


## Data availability differs across countries



# ENERGY PERFORMANCE CERTIFICATES – RMBS

EPC distribution by country differs greatly





# CENED: THE EPC REGISTER IN LOMBARDY



Certificazione **EN**ergetica degli **ED**ifici

## Data Sample

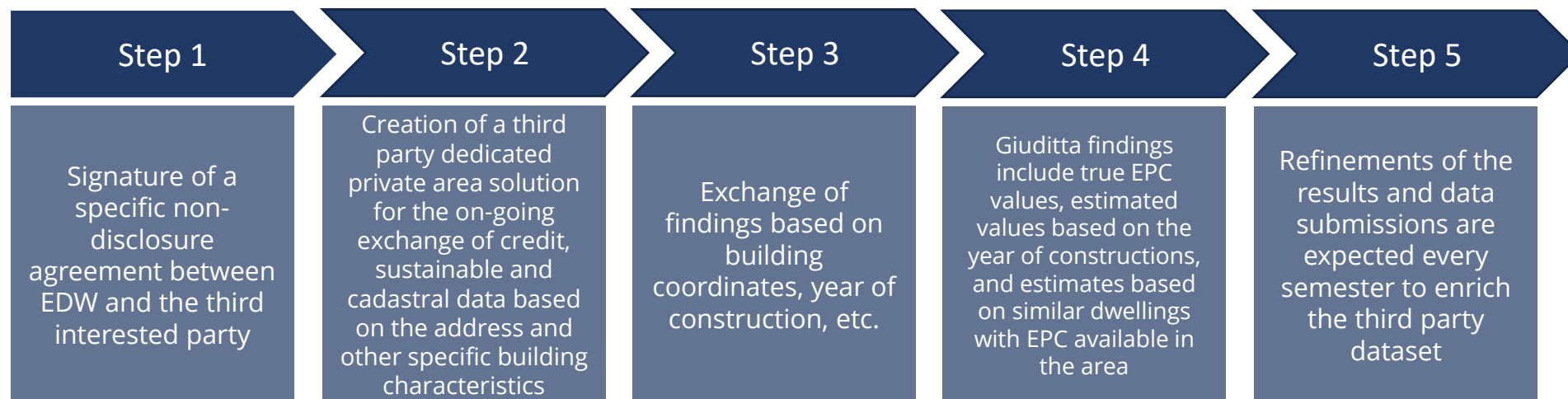
Mortgage Information				Building Information with cadastral data							ENERGY PERFORMANCE
Loan ID	Borrower ID	Building ID	Amount of the financing	City	Address	House Number	FOGLIO	MAPPAL	SUBALTERNO	Year of building completion	
919897	532942	253951	€108,392.00	SIRMIONE	VIA TRENTO	1	10	177	22	1995	
786274	880905	232955	€106,850.00	VILLIMPENTA	VIA GANDHI	5	7	601	1	2010	
690293	863507	326831	€187,002.00	MILANO	VIA RAFFAELE PARRAVICINI	18	196	236	3	1955	
381670	616389	870795	€255,837.00	GIUSSANO	VIA GIUSEPPE PARINI	40	2	432	3	2011	
623376	567003	355897	€105,512.00	GARDONE RIVIERA	CORSO ZANARDELLI	210	5	847	84	1990	
613700	212842	281623	€207,794.00	MILANO	VIA FUMAGALLI	3	520	5	781	1900	
844437	333663	448958	€432,807.00	NOVATE MILANESE	VIA MATTEOTTI	18	16	291	4	1966	
273472	108300	995250	€466,528.00	PALAZZAGO	VIA FRATELLI RIPAMONTI	3	15	5558	716	1962	
932633	118526	680960	€311,151.00	PAVIA	VIA PIETRO NENNI	65	26	704	21	1978	
973318	194032	995089	€477,217.00	VIGEVANO	VIA PASCOLI	5	17	2058	1	1948	

## CENED Sample

CENED Information							Energy Performance Certificate
City	Address	House Number	foglio	particella	subalterno	Year Of construction	
NOVATE MILANESE	VIA MATTEOTTI	18	16	291	4	1966	E
PALAZZAGO	VIA FRATELLI RIPAMONTI	3	15	5558	716	1961-1976	F
MILANO	VIA FUMAGALLI	3	520	5	781	Prima del 1930	A1
SIRMIONE	VIA TRENTO	1	10	177	22	1993-2006	G
GARDONE RIVIERA	CORSO ZANARDELLI	210	5	847	84	1977-1992	D
VILLIMPENTA	VIA GANDHI	5	7	601	1	2010	C
MILANO	VIA RAFFAELE PARRAVICINI	18	196	236	3	1946-1960	G
PAVIA	VIA PIETRO NENNI	65	26	704	21	1977-1992	F
VIGEVANO	VIA PASCOLI	5	17	2058	1	1946-1960	G
GIUSSANO	VIA GIUSEPPE PARINI	40	2	432	3	2011	C

Source: CENED Website

## EPC PROCESS AND APPLICATIONS

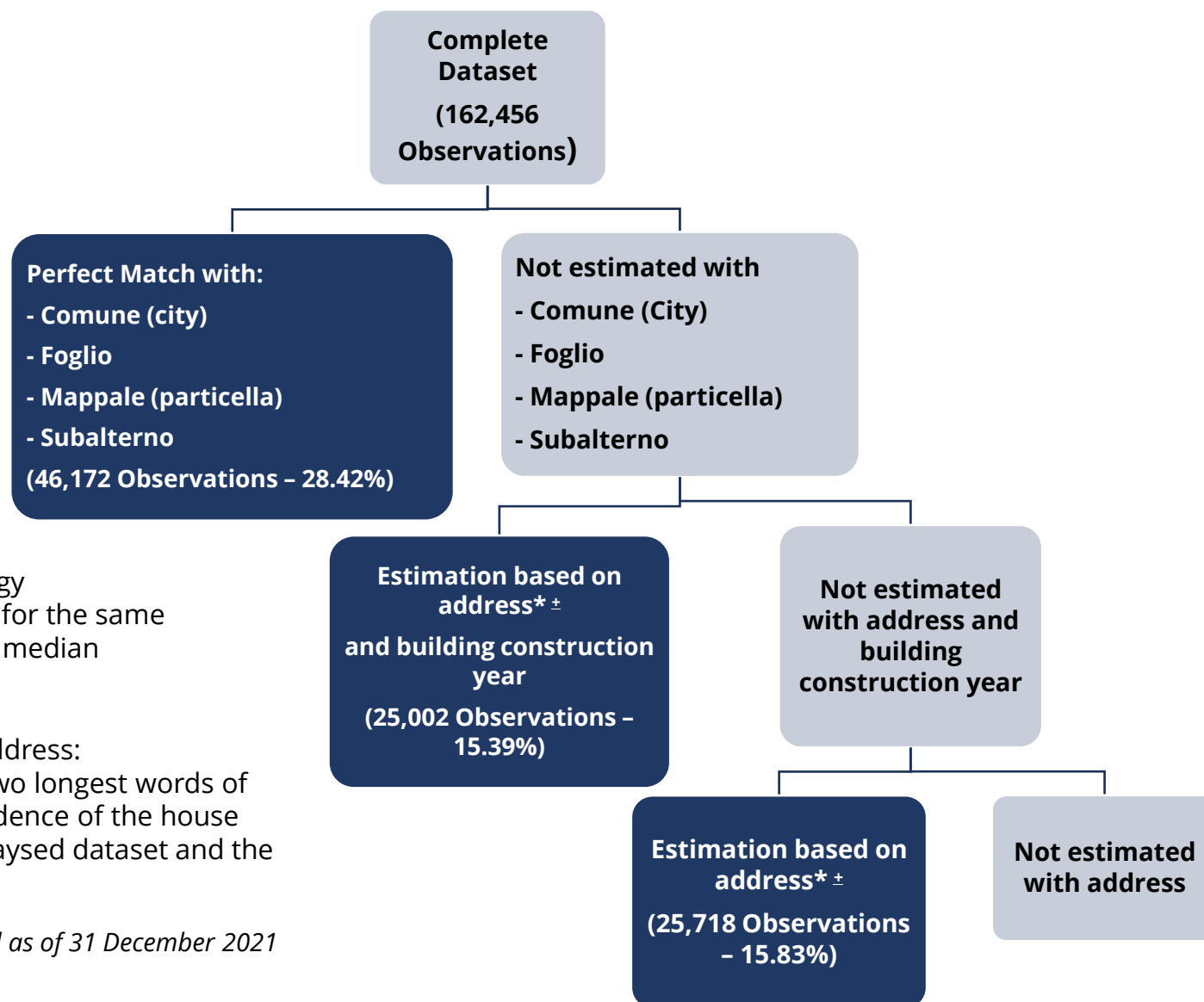


Some of the practical applications of Giuditta:

- Collection of energy efficiency data for buildings restricted to a limited geographic area (only Lombardy for the moment)
- Collection of data on loans underwritten between banks and their clients
- Evaluation of the percentage of buildings with available epc and evaluation of the energy efficiency labels distribution within a pool.
- Periodic update of the information on energy efficiency extracted from internal or external sources through EDW private area
- Enrichment of the pool of ESG data of the portfolios of financial institutions

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# EPC MATCHING METHODOLOGY – PORTFOLIO 1

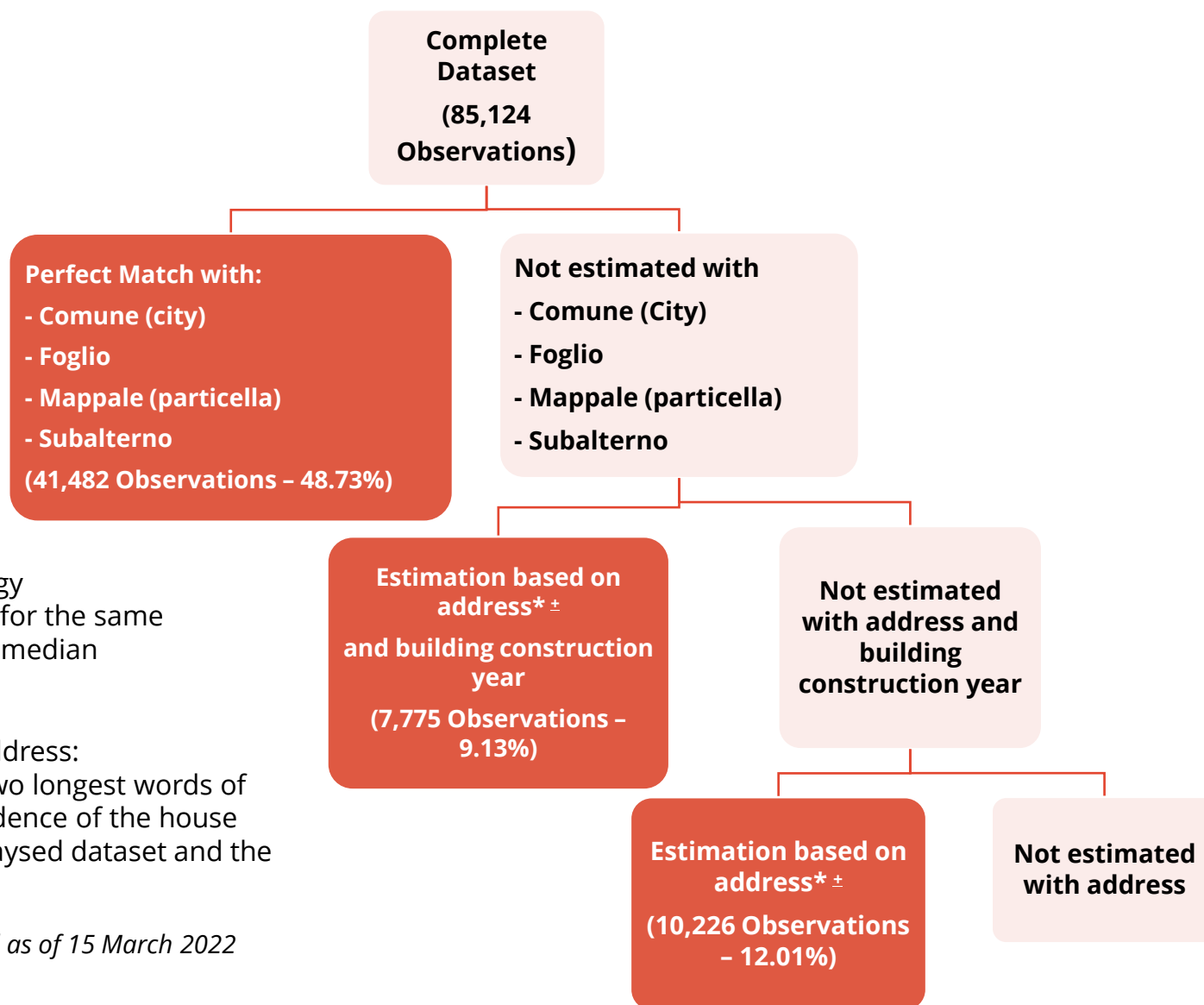


\*In case of multiple energy performance certificates for the same address we calculate the median value of CO2 emissions.

± Estimation based on address: correspondence of the two longest words of the address + correspondence of the house number between the analysed dataset and the CENED database.

Source: CENED data updated as of 31 December 2021

# EPC MATCHING METHODOLOGY – PORTFOLIO 2



\*In case of multiple energy performance certificates for the same address we calculate the median value of Co2 emissions.

± Estimation based on address: correspondence of the two longest words of the address + correspondence of the house number between the analysed dataset and the CENED database.

Source: CENED data updated as of 15 March 2022

# EPC EXTRACTION EXAMPLES WITH PERFECT COMBINATION AND ESTIMATES

## Perfect match with Foglio Mappale Subalterno

Sample Bank Data							CENED Data						
Loan ID	City	Address	House Number	Foglio	Mappale	Subalterno	EPC Date	EPC	Type of Match	CO2 Emissions	City	Address	Foglio, Mappale, Subalterno
1	SAN PAOLO	Via dello Stornello	6	17	415	10	22/12/2019	D	FMS	27.77	SAN PAOLO	Via dello Stornello 6	17,415,10
2	MILANO	VIA MARCO AURELIO	39	233	39	703	22/12/2019	F	FMS	68.78	MILANO	VIA MARCO AURELIO 39	233,39,703
3	SARONNO	Corso Italia	39	11	25	1	23/12/2019	G	FMS	179.77	SARONNO	Corso Italia 39	11,25,1

## Estimate based on Address and year of building construction \*

Sample Bank Data								CENED Data										
Loan ID		City	Address		House Number	Date of building Construction	Foglio	Mappale	Subalterno	EPC Date	EPC	Type of Match	CO2 Emissions	City	Address		Date of Building Construction	Foglio, Mappale, Subalterno
4	VIGEVANO		VIA SETTE DORMIENTI		54	1940	19	3647	20	01/01/2016	G	Address + Building Date	96.56	VIGEVANO	VIA SETTE DORMIENTI 54		1940	19,3647,20
5	COLOGNO MONZESE		VIA GIOACHINO ROSSINI		7	1967	6	73	80	01/02/2016	G	Address + Building Date	38.64	COLOGNO MONZESE	VIA GIOACHINO ROSSINI 7		1967	6,73,77
6	MILANO		Via della Chiusa		2	2008	436	319	802	01/01/2020	A2	Address + Building Date	63.13	MILANO	Via della Chiusa 2		Dopo il 2006	436,320,76

## Estimate with only Address

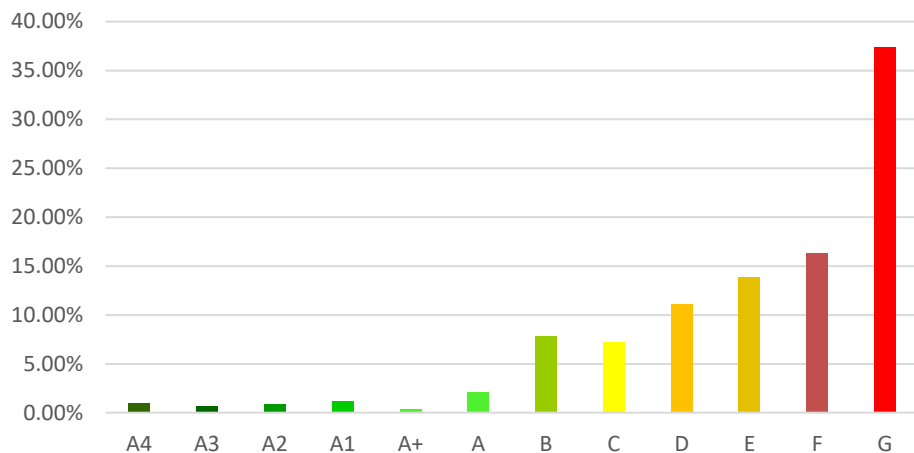
Sample Bank data				CENED Data						
Loan ID	City	Address	House Number	EPC Date	EPC	Type of Match	CO2 Emissions	City	Address	
7	MILANO	Via Gamboloita	4	01/01/2018	E	Address	14.65	MILANO	Via Gamboloita 4	
8	CASTELLANZA	Via Varese	6	01/01/2021	E	Address	40.04	CASTELLANZA	Via Varese 6	
9	MILANO	VIA BRONZETTI	35	01/01/2021	F	Address	40.36	MILANO	VIA BRONZETTI 35	

Source: CENED database

# PERCENTAGES OF ENERGY PERFORMANCE CERTIFICATES WITH THE DIFFERENT METHODOLOGIES

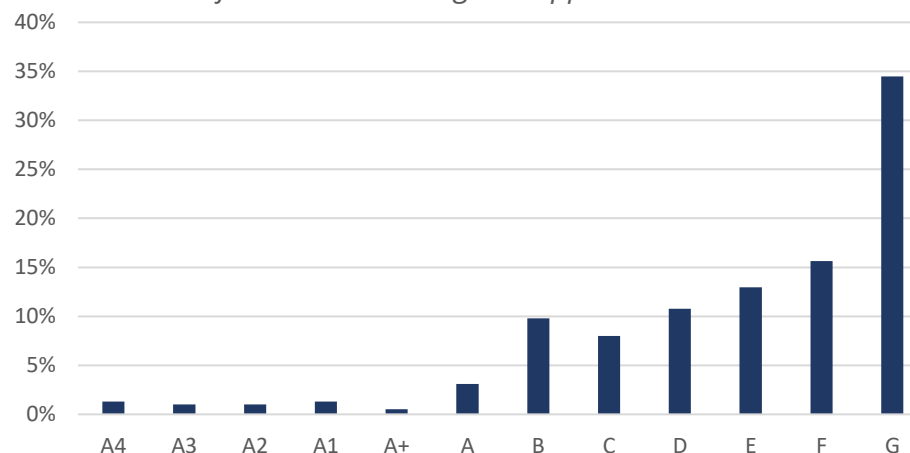
## Energy Performance Certificates

*All observations*



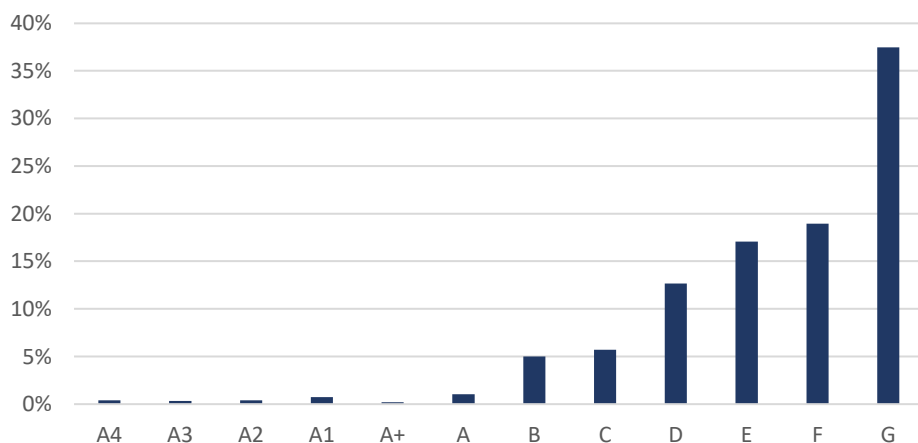
## Energy Performance Certificates

*Perfect match with Foglio-Mappale-Subalterno*



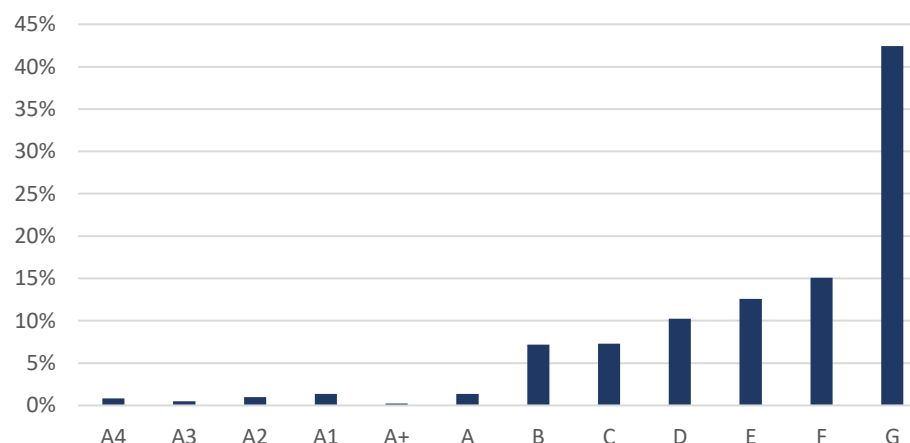
## Energy Performance Certificates

*Estimate based on address and building construction year*



## Energy Performance Certificates

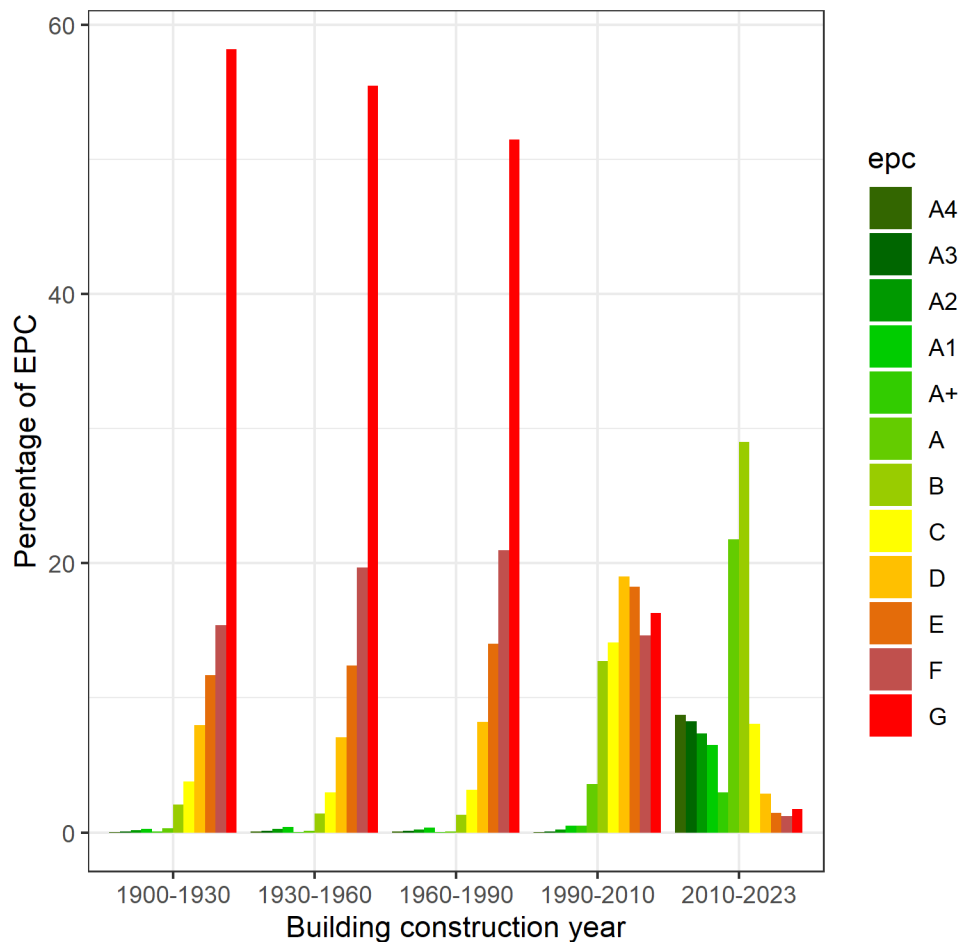
*Estimate based on address*



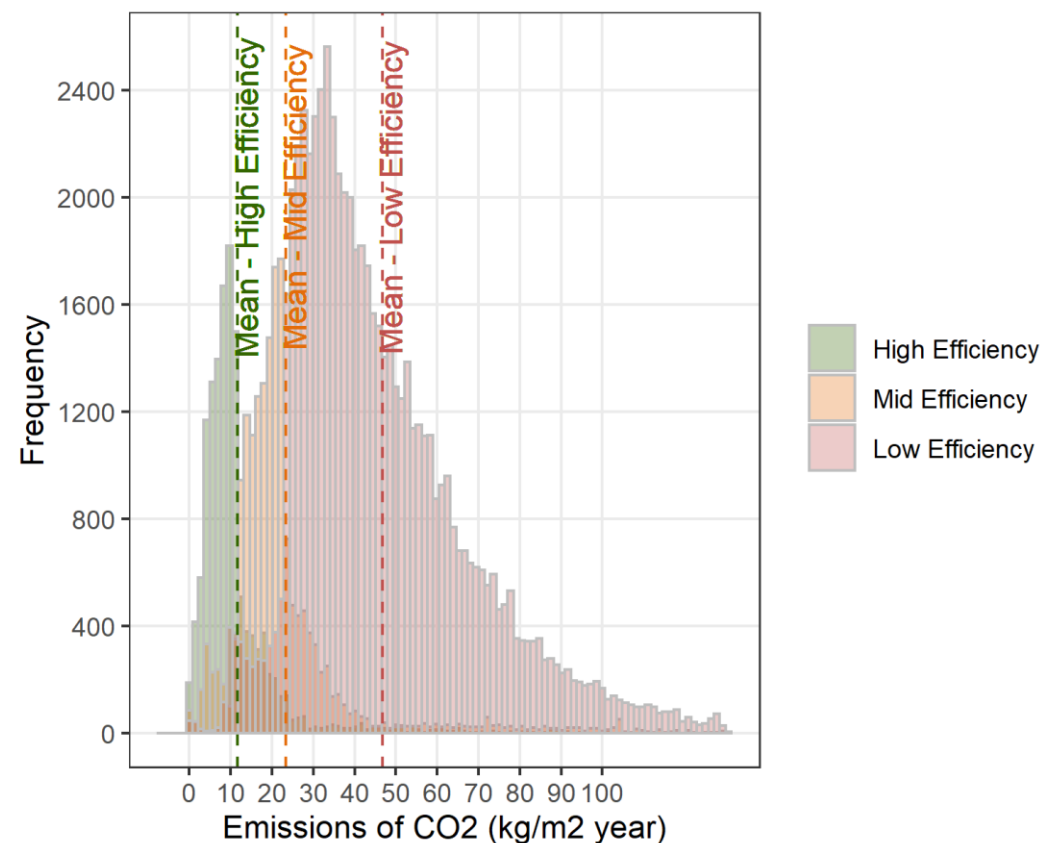
Source: EDW Calculations

# EPC ANALYSIS – KEY RESULTS

Energy Performance Certificate by building construction year



Co2 emissions by energy efficiency class

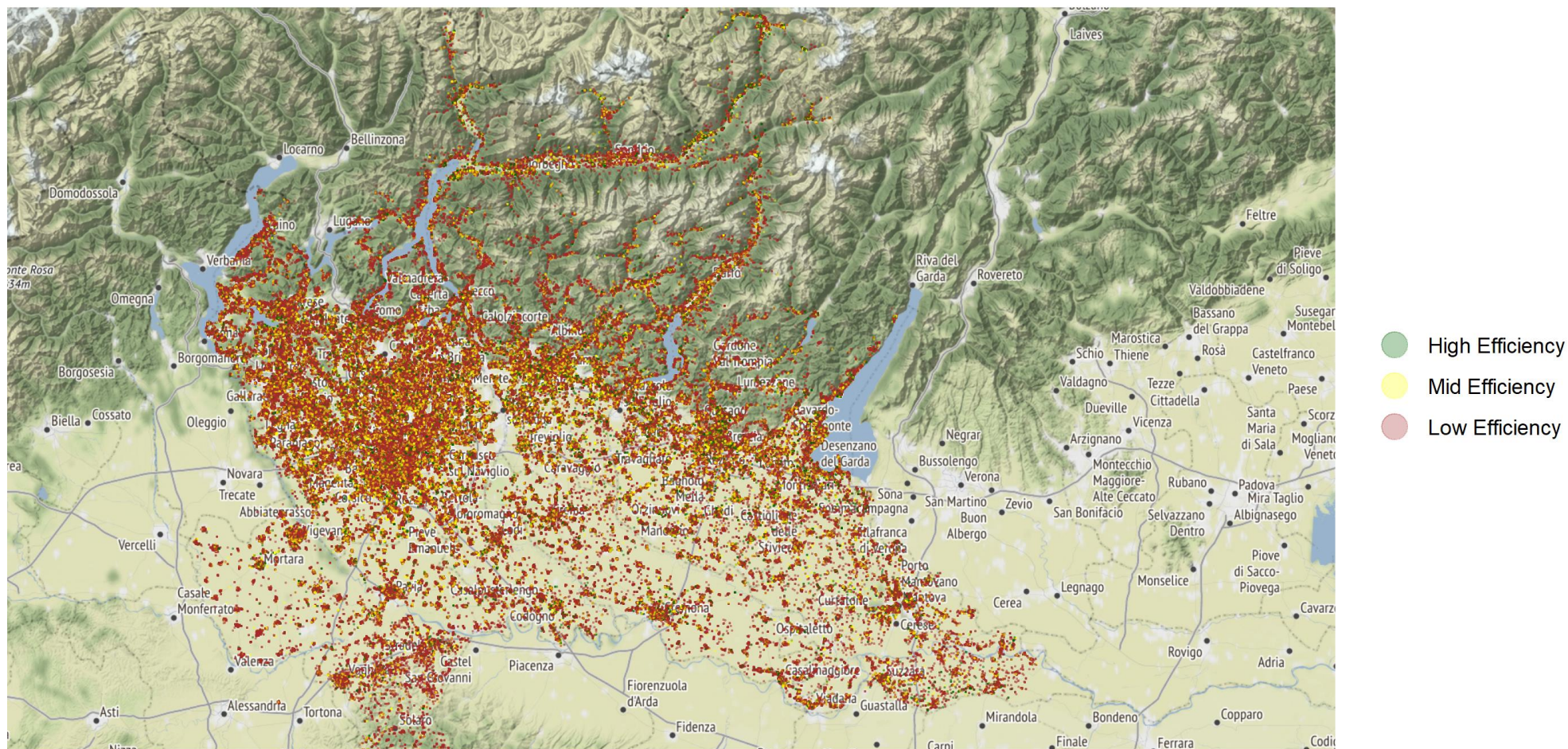


Notes: High Efficiency = A4-B;  
Mid Efficiency = C,D;  
Low Efficiency = E-G

Source: CENED and EDW Calculations



# GEOGRAPHICAL DISTRIBUTION CENED EPC - LOMBARDY



Notes: High Efficiency = A4-B;

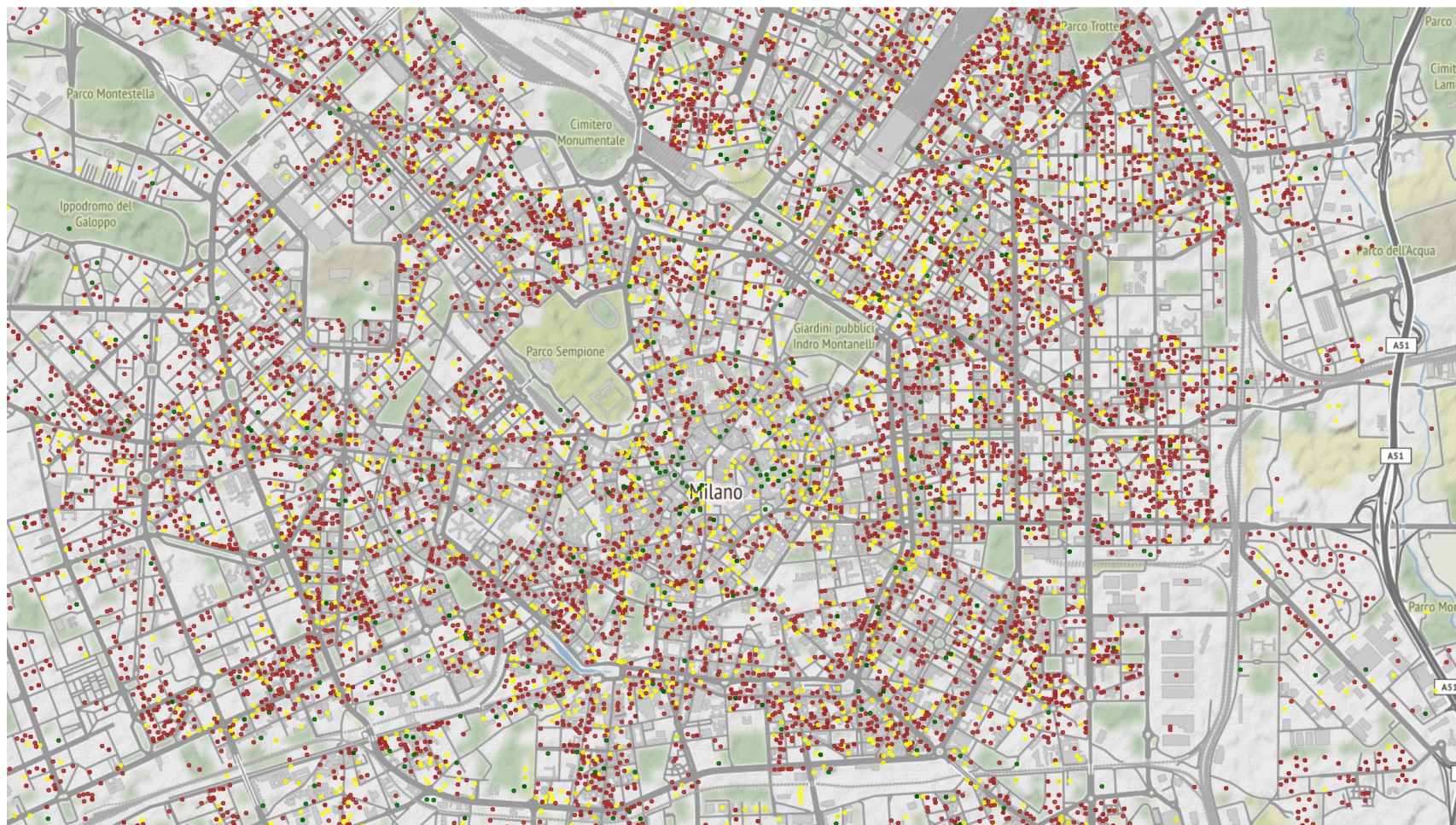
Mid Efficiency = C,D;

Low Efficiency = E-G

Source: CENED and EDW Calculations



# GEOGRAPHICAL DISTRIBUTION CENED EPC - MILAN



- High Efficiency
- Mid Efficiency
- Low Efficiency

Notes: High Efficiency = A4-B;

Mid Efficiency = C,D;

Low Efficiency = E-G

Source: CENED and EDW Calculations



**Q&A**

# UPCOMING WEBINARS

Visit the <https://eurodw.eu/news-events-and-multimedia/events/> page to register for upcoming events

<p><b>24.</b></p> <p>MAR 2022</p>	<p>Turning NPLs into a Commodity – Opportunities and Obstacles @ 16:00 with PwC, Debitos, doValue &amp; the ECB</p>
<p><b>30.</b></p> <p>MAR 2022</p>	<p>EDW 2022 Spring Workshop Series – Spanish Market Webinar @ 16:00 CEST</p>
<p><b>06.</b></p> <p>APR 2022</p>	<p>EDW 2022 Spring Workshop Series – French Market Webinar @ 16:00 CEST</p>
<p><b>27.</b></p> <p>APR 2022</p>	<p>EDW 2022 Spring Workshop Series – German Market Webinar @ 16:00 CEST</p>



# THANK YOU // CONTACT US

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