

EUROPEAN DATAWAREHOUSE



EUROPEAN
DATAWAREHOUSE

FRENCH SECURITISATION EVENT

6 DECEMBER 2024



AGENDA

14:00 WELCOME & INTRODUCTION

OLIVIER CLEMENTIN (BANQUE DE FRANCE)

14:05 DATA QUALITY AND CASH FLOW RELATED FIELDS

THIBAUT JAUMOTTE (EDW)

14:20 EDW NEW SOLUTIONS (EDWARD/EDVANCE)

LUDOVIC THEBAULT (EDW)

14:25 EDW RESEARCH

LUDOVIC THEBAULT (EDW)

14:30 STUDY ON THE CLIMATE RISK & IMPACT OF AUTO ABS

MAXIME BARTHE (BANQUE DE FRANCE)

14:45 GREEN AUTO SECURITISATION RESEARCH PROJECT (GAS)

MARINE MAITRE & LUDOVIC THEBAULT (EDW)

15:00 ENGAGE FOR ESG – EU TAXONOMY ASSESSMENT

MARCO ANGHEBEN (EDW)

15:10 COFFEE BREAK

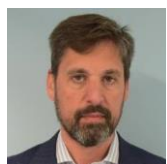
15:30 PANEL: EU SECURITISATION REGULATION CONSULTATION

FABRICE FAURE-DAUPHIN (A&O SHEARMAN), FRANÇOIS HAAS (BANQUE DE FRANCE),
NATHALIE ESNAULT (CA-CIB), TAMAR JOULIA-PARIS (IACPM)

16:20 CLOSING REMARKS

LUDOVIC THEBAULT (EDW)

AT TODAY'S EVENT



OLIVIER CLEMENTIN
BANQUE DE FRANCE

olivier.clementin@banque-france.fr



MAXIME BARTHE
BANQUE DE FRANCE

maxime.barthe@banque-france.fr



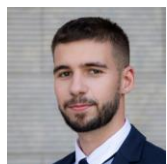
FABRICE FAURE-DAUPHIN
A&O SHEARMAN

fabrice.faure-dauphin@aoshearman.com



FRANÇOIS HAAS
BANQUE DE FRANCE

francois.haas@banque-france.fr



THIBAULT JAUMOTTE
EDW

thibault.jaumotte@eurodw.eu



MARINE MAITRE
EDW

marine.maitre@eurodw.eu



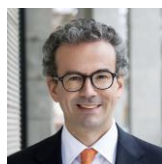
NATHALIE ESNAULT
CA-CIB

nathalie.esnault@ca-cib.com



LUDOVIC THEBAULT
EDW

ludovic.thebault@eurodw.eu



MARCO ANGHEBEN
EDW

marco.Angheben@eurodw.eu



TAMAR JOULIA
IACPM

tamar@iacpm.org



WELCOME & INTRODUCTION

OLIVIER CLEMENTIN, BANQUE DE FRANCE

DATA QUALITY AND CASH FLOW RELATED FIELDS

THIBAUT JAUMOTTE, EUROPEAN DATAWAREHOUSE

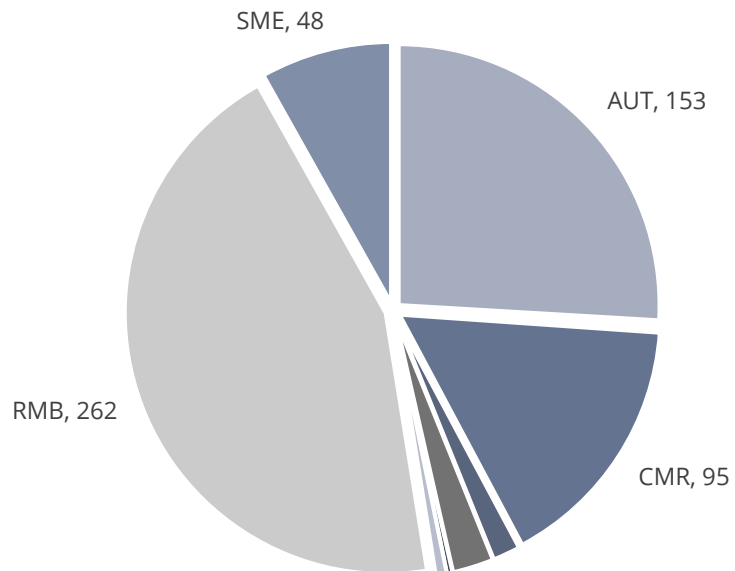


FRANCE: MARKET OVERVIEW

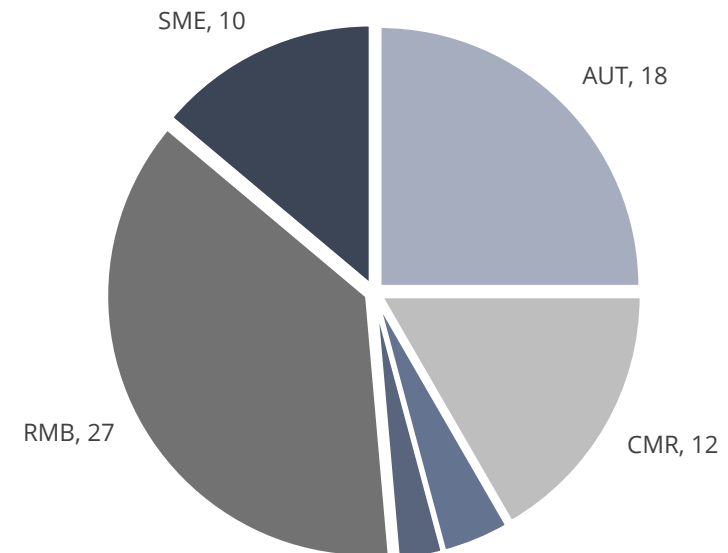
FRANCE: A STRONG MARKET IN EUROPE

RMB, AUT, SME AND CMR DOMINATE THE FRENCH MARKET, AS THEY DO FOR ALL JURISDICTIONS

All countries - Number of deals by Asset Class



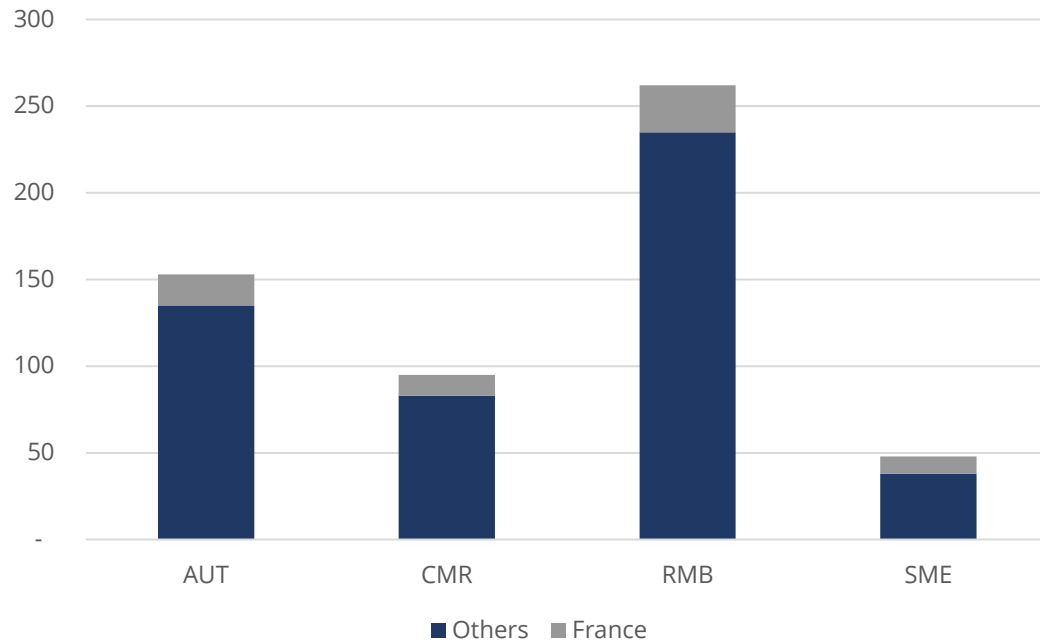
France - Number of deals by Asset Class



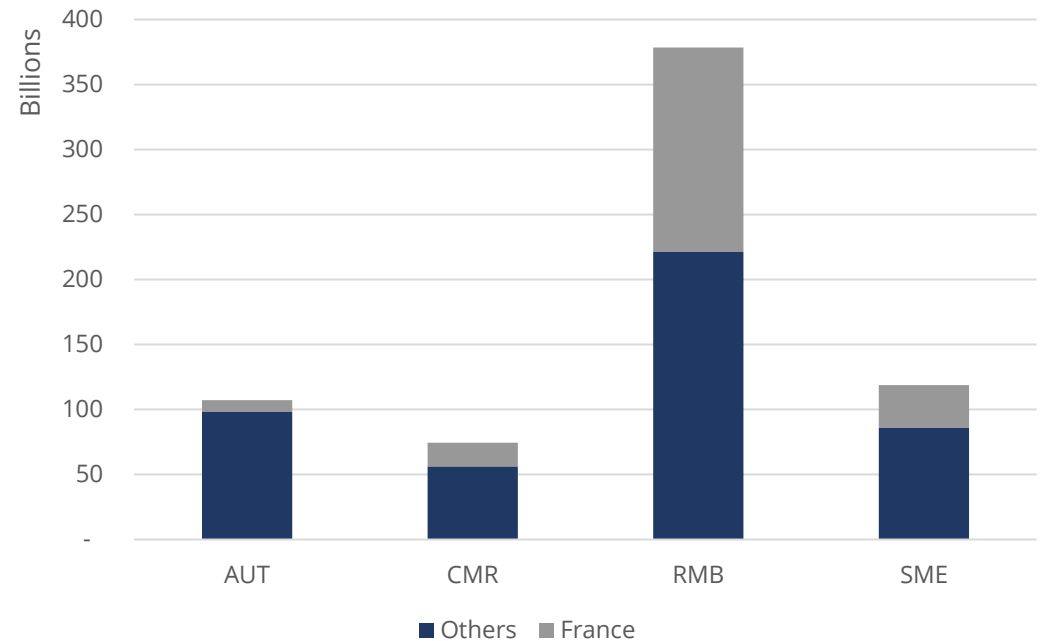
FRANCE: A STRONG MARKET IN EUROPE

FRENCH RMB REPRESENT ALMOST HALF OF ALL RMB DEALS IN TERMS OF CURRENT BALANCE

Number of deals by Asset Class



Current Balance by Asset Class





DATA QUALITY

PHASE OUT OF LEGACY ECB REPORTING FRAMEWORK

EU ABS ISSUERS HAD TO MIGRATE BY SEPTEMBER 30, 2024, TO RETAIN ELIGIBILITY

PRESS RELEASE

Transparency requirements of EU Securitisation Regulation to be incorporated into Eurosystem collateral framework

22 March 2019

- > Eligibility requirements for loan-level data reporting in collateral framework to be adjusted to reflect EU Securitisation Regulation's disclosure requirements

- > Eligibility requirements for loan-level data reporting in collateral framework to be adjusted to reflect EU Securitisation Regulation's disclosure requirements
- > Phase-out of legacy ECB reporting framework

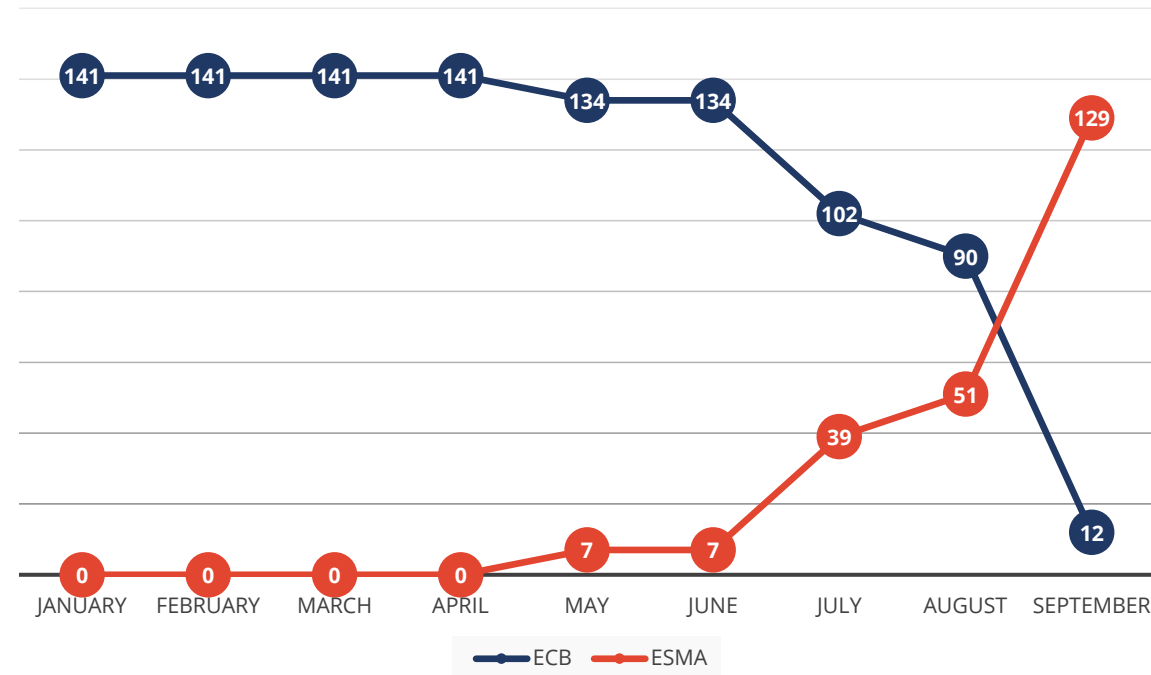
PRESS RELEASE

Changes to the Eurosystem's loan-level data requirements

28 June 2021

- > ESMA reporting templates to be used as of 1 October 2021, replacing the current ECB templates
- > All asset-backed securities (ABSs) seeking collateral eligibility are subject to the same Eurosystem loan-level data requirements, regardless of any disclosure exemption under the Securitisation Regulation
- > New reporting template for non-marketable debt instruments backed by eligible credit claims (DECCs)

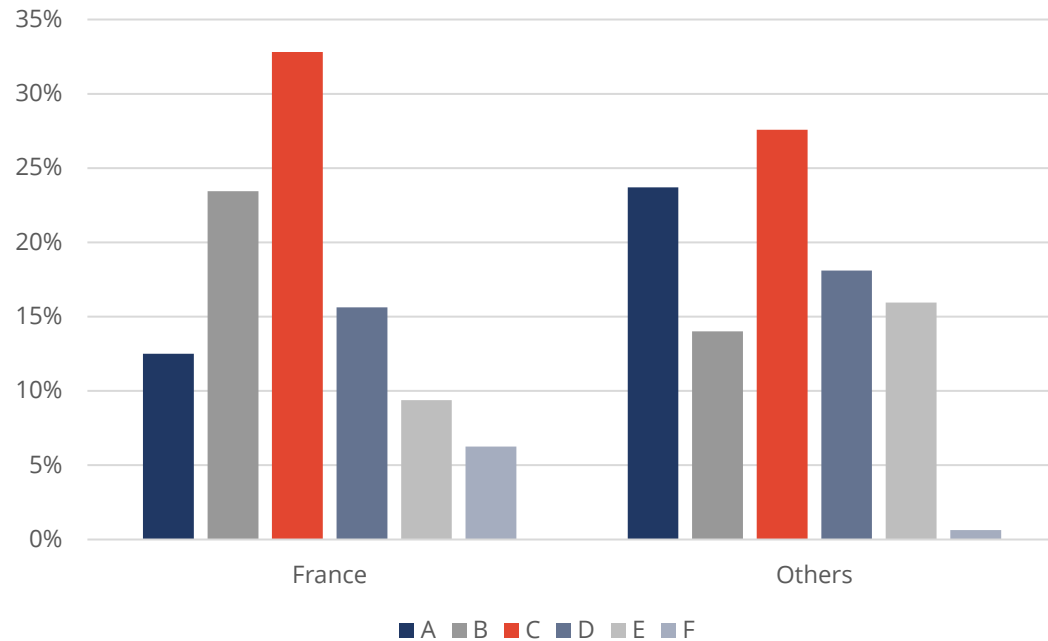
Migration from ECB reporting to ESMA reporting in 2024



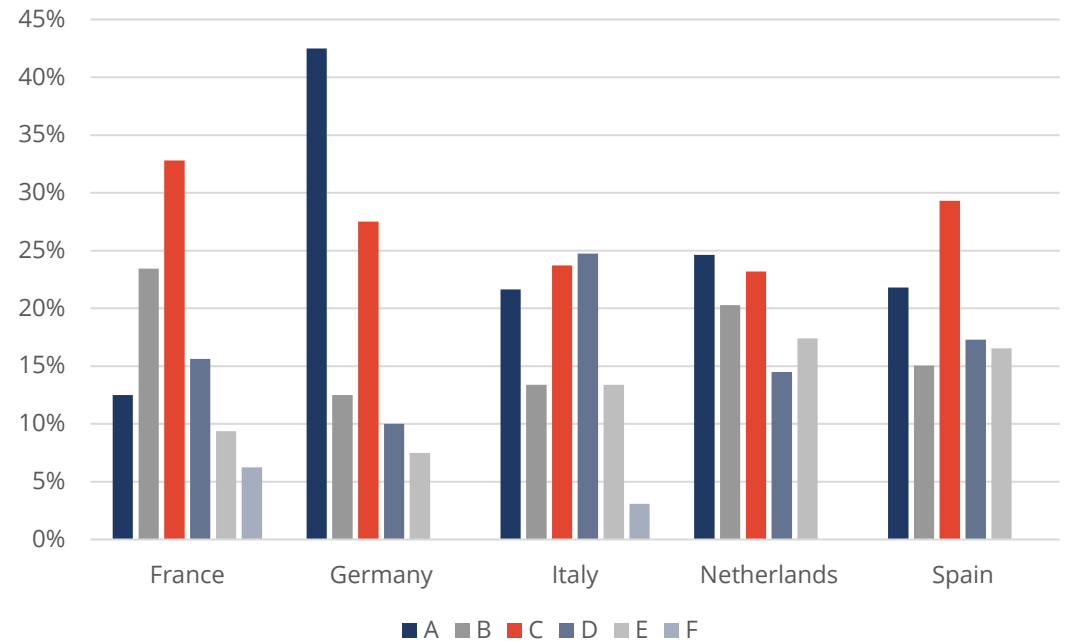
FRANCE: DATA QUALITY LOWER THAN IN OTHER COUNTRIES

ONE THIRD OF FRENCH PUBLIC ABS DEALS RATED C

France vs Others - ESMA Data Quality Score



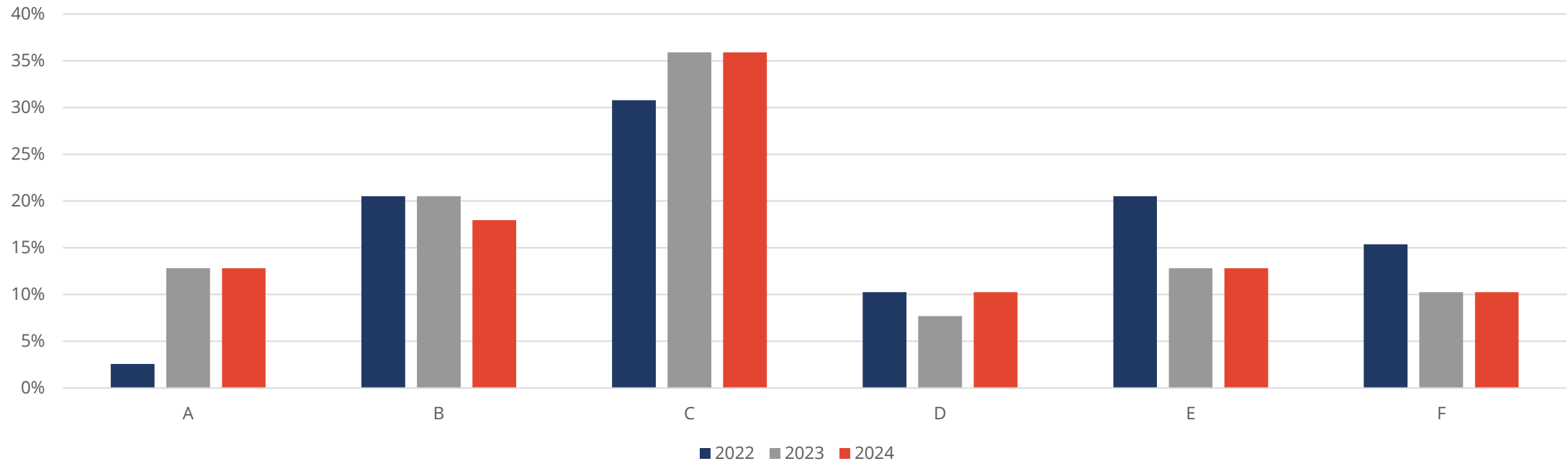
France vs Others - ESMA Data Quality Score



FRANCE: SLIGHT IMPROVEMENT IN DATA QUALITY SINCE 2022

DATA QUALITY IMPROVED BETWEEN 2022 AND 2023, BUT ON HOLD SINCE THEN

France - Evolution ESMA DQS



DATA QUALITY SCORE - DQS

HOW IT'S COMPUTED ?

The Data quality score is based on this formula:

$$\text{DQS ratio} = \frac{\sum(F_f)}{(n \times MF)}$$

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.

DQS 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%	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

MAIN DRIVERS OF THE DQS

ONLY A FEW FIELDS CONTRIBUTE TO THE HIGHEST NUMBER OF DATA QUALITY ISSUES

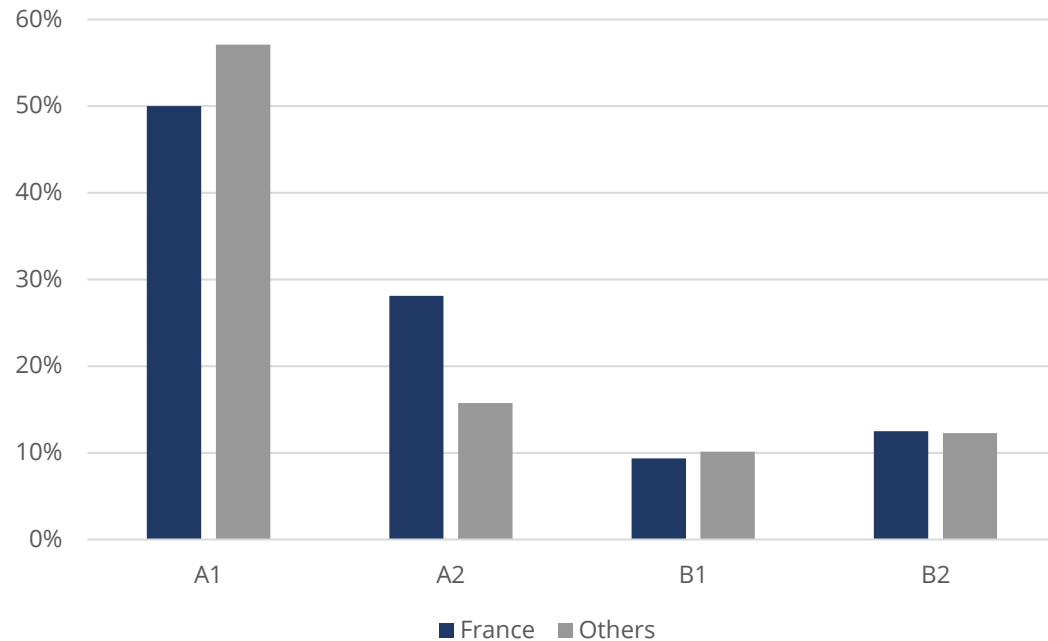
TOP 10	ESMA FIELD	NO. OF LOANS
1	Origination channel	1,881,322
2	Date Of Updated Residual Valuation Of Vehicle	453,531
3	Default Amount	422,138
4	Default Date	413,774
5	Balloon Amount	408,398
6	Interest Rate Cap	292,461
7	Redemption Date	279,959
8	Credit Impaired Obligor	215,996
9	Number Of Days In Arrears	188,005
10	Allocated Losses	151,995

TOP 10	ESMA FIELD	NO. OF DEALS
1	Number Of Days In Arrears	249
2	Redemption Date	163
3	Current Principal Balance	104
4	Default Amount	102
5	Current Loan-To-Value	86
6	Current Valuation Date	82
7	Reason for Default or Foreclosure	71
8	Maturity Date	69
9	Default Date	68
10	Account Status	60

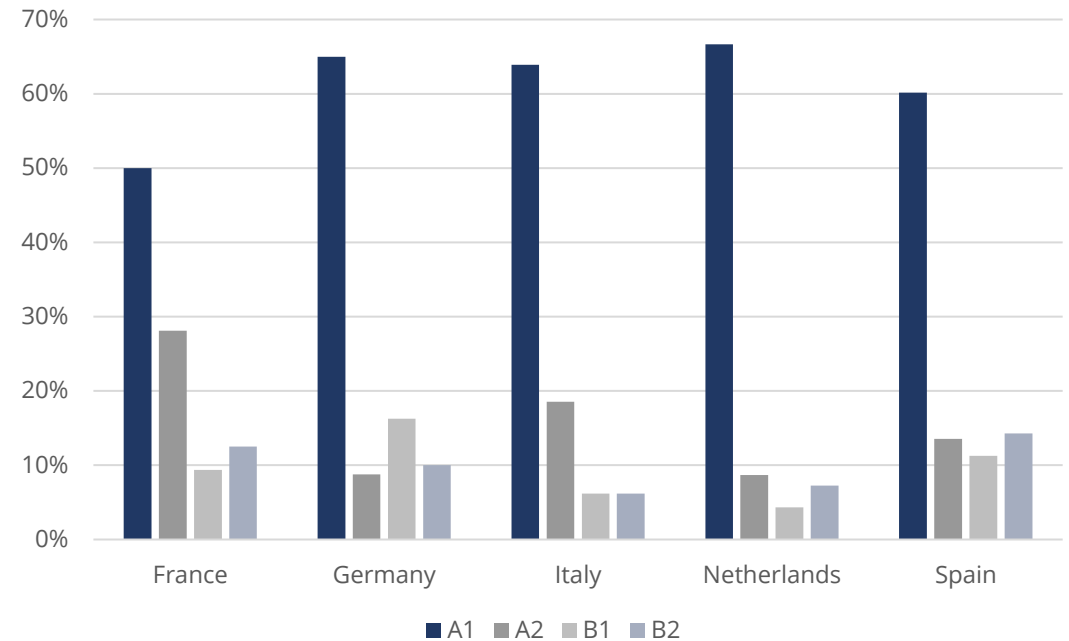
FRANCE: COMPLETENESS SLIGHTLY LOWER THAN IN OTHER COUNTRIES

COMPLETENESS SCORES IN FRANCE ARE CLOSER TO SCORES IN OTHER COUNTRIES THAN ARE DATA QUALITY SCORES

France vs Others - ESMA Completeness Score



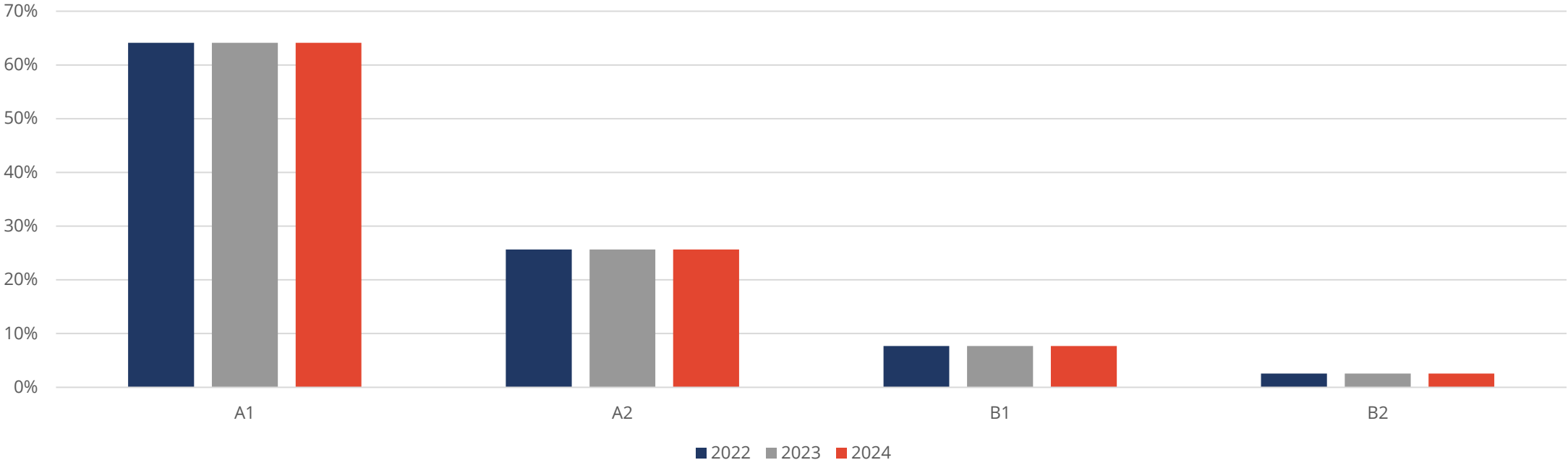
France vs Others - ESMA Completeness Score



FRANCE: COMPLETENESS STABLE SINCE 2022

DATA QUALITY HAS REMAINED THE SAME OVER THE PAST THREE YEARS

France - Evolution ESMA Completeness



ESMA SCORE

HOW IT'S COMPUTED ?

ESMA score is based on this matrix:

	Input 1 = 0 %	0 % < Input 1 ≤ 10 % 1	10 % < Input 1 ≤ 30 %	Input 1 > 10 %
Input 2 = 0 %	A1	B1	C1	D1
0 % < Input 2 ≤ 20 %	A2	B2	C2	D2
20 % < Input 2 ≤ 40 %	A3	B3	C3	D3
Input 2 > 40 %	A4	B4	C4	D4

Where:

- Input 1: Percentage of fields entered as 'ND1'
- Input 2: Percentage of fields entered as 'ND2', 'ND3' or 'ND4-YYYY-MM-DD'

SPECIAL FOCUS ON CASH FLOW RELEVANT FIELDS

MISSING DATA ON CRITICAL FIELDS USED FOR ABS PRICING RMBS

FEEDBACK FROM BANQUE DE FRANCE, IN CHARGE OF THE EUROSISTEM ABS PRICING

Field Name	Field Code	ND5	CZ	Other
Maturity Date	RREL24	✓		
Interest Rate Type	RREL42	✓		✓
Current Interest Rate Index	RREL44	✓		✓
Current Interest Rate	RREL43	✓	✓	
Current Interest Rate Index Tenor	RREL45	✓		✓
Current Interest Rate Margin	RREL46	✓	✓	
Current Principal Balance	RREL30	✓	✓	
Original Principal Balance	RREL29	✓	✓	
Amortisation Type	RREL35			✓
Scheduled Interest Payment Frequency	RREL38	✓		✓

MOST IMPACTED FIELDS (INCLUDING DATA QUALITY PLUS RULES)

INAPPROPRIATE USE OF ND5 IS A WIDESPREAD ISSUE ACROSS ALL CASH FLOW RELEVANT FIELDS

Cash Flow relevant data fields	Cross templates	Unusual zeros	Inter-field checks	ND5	Negative values	Use of "Other"	Unusual dates	Unusual high values	Unusual low values	Total fields impacted
Current Interest Rate Index Tenor				576,963		4,232,312				4,809,275
Current Interest Rate Margin		707,732		3,650,323	15,729			38	19,758	4,393,580
Current Interest Rate		560,523		1,787,509	8,169			1,522,963	153,680	4,032,844
Current Interest Rate Index				74,271		3,431,956				3,506,227
Current Principal Balance	172	2,345,458	32,326	6,257	269,584			5,578		2,659,375
Amortisation Type						1,862,559				1,862,559
Scheduled Interest Payment Frequency				65,993		964,172				1,030,165
Interest Rate Type				75,902		21,409				97,311
Maturity Date				44,153			33,779			77,933
Original Principal Balance		10		8,449	4					8,463

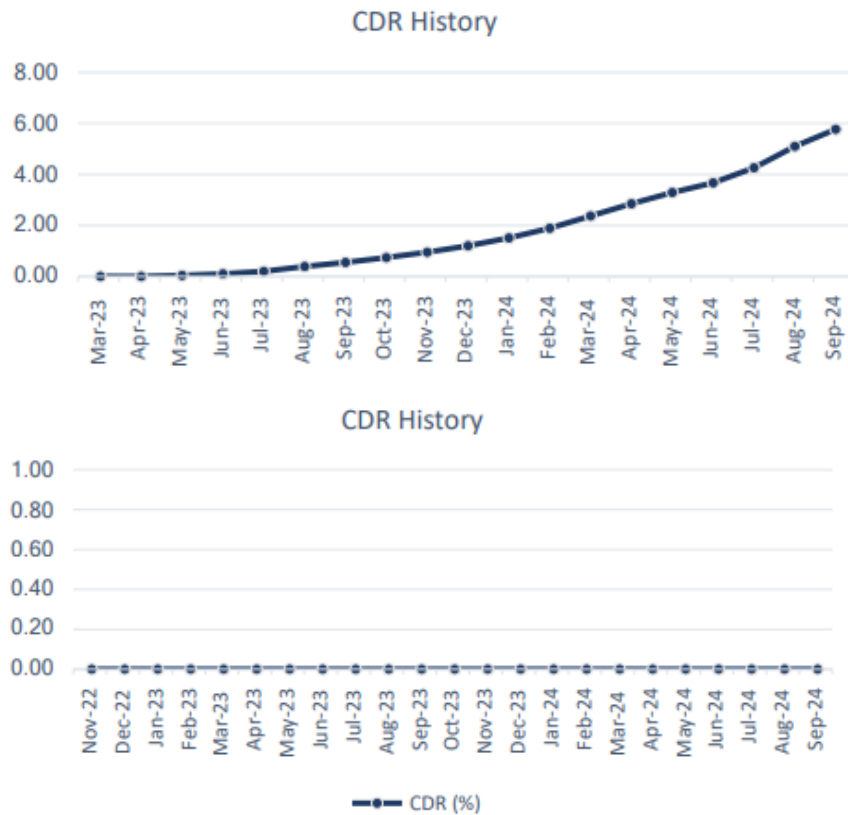
MOST IMPACTED FIELDS (INCLUDING DATA QUALITY PLUS RULES)

INAPPROPRIATE USE OF ND5 IS A WIDESPREAD ISSUE ACROSS ALL CASH FLOW RELEVANT FIELDS

Cash Flow relevant data fields	Cross templates	Unusual zeros	Inter-field checks	ND5	Negative values	Use of "Other"	Unusual dates	Unusual high values	Unusual low values
Current Principal Balance	172	115	196	16	65			84	
Current Interest Rate Margin		161		92	57			6	77
Current Interest Rate		172		18	8			19	86
Current Interest Rate Index				56		223			
Current Interest Rate Index Tenor				39		204			
Amortisation Type						160			
Scheduled Interest Payment Frequency				23		52			
Maturity Date				64			5		
Interest Rate Type				16		22			
Original Principal Balance		4		5	3				

ANNUAL CONSTANT DEFAULT RATE - CDR

REPORTING A CUMULATIVE CDR INSTEAD OF AN ANNUALIZED CDR



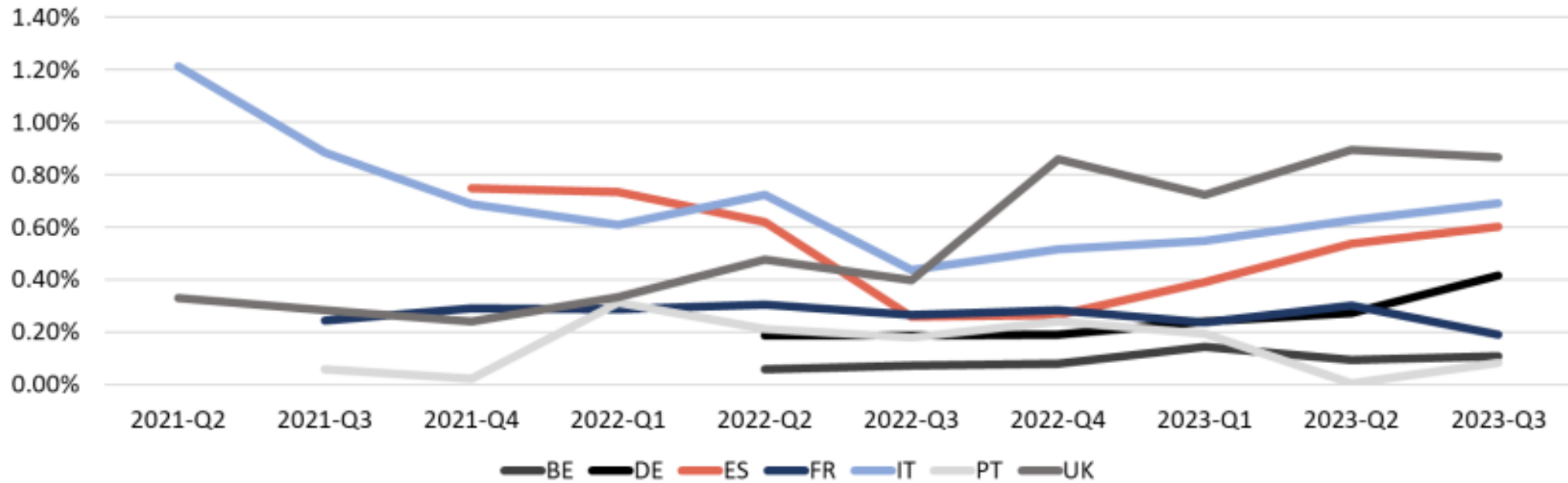
TYPE OF ISSUE	NUMBER OF TICKETS PENDING	TICKET CLOSED ISSUE FIXED
Annual CDR* equal to 0 while default amount and default status are reported	53	22
Annual CDR greater than 2%	13	1
Annual CDR greater than 5%	10	2

* Field IVSS27 of ESMA Annexe 12

CDR INDICES

RESIDENTIAL MORTGAGES

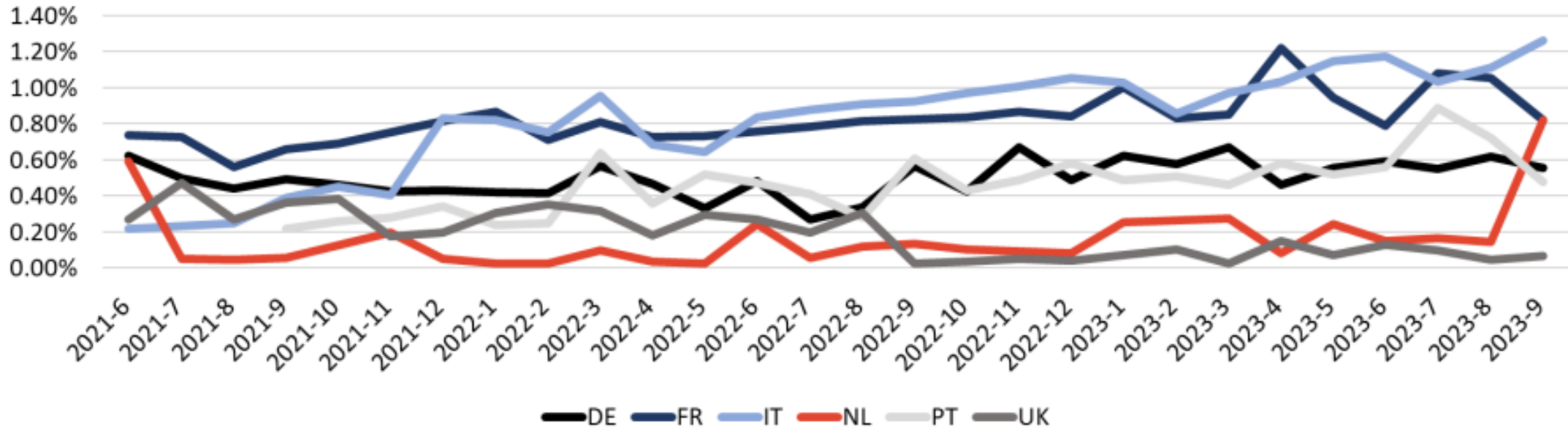
CDR Index (RMBS)
Weighted Average CDR As Reported in Annex 12



CDR INDICES

AUTO

CDR Index (AUTO)
Weighted Average CDR As Reported In Annex 12



EDW NEW SOLUTIONS (EDWARD/EDVANCE)

LUDOVIC THEBAULT, EUROPEAN DATAWAREHOUSE



THE ALL NEW EDVANCE

EDVANCE

DISCOVER ALL-IN-ONE DATA ACCESS

The screenshot displays the EDVANCE web application interface. At the top, there is a search bar with a magnifying glass icon and a plus sign with a document icon. Below the search bar, the application header includes the EDVANCE logo and a search input field. A navigation menu on the left lists various features: Home, Deals, Counterparties, Edward AI Assistant, SQL Workbench, My Portfolio, My Data Requests, My Subscriptions, and Logoff. The main content area shows a table of deals with columns for Deal Name, EDCode, Country, Vintage, IPD, PCD, Uploaded, Loans, and C.Bal (mm). The table is filtered to show 1813 deals. The deals listed include AutoFlorence 2 S.B.L., BBVA RMBS 14 FTA, Quatro Srl 2023, Quatro Srl 2020, Cars Alliance Auto Loans France Master, BPCE HOME LOANS FCT 2017_5, Volta VIII Electricity Receivables Securitisation Notes, Rocky 1, CARS ALLIANCE AUTO LOANS SPAIN 2022_FT, GB 2023-2 Golden Bar (Securitisation) S.r.l., and GinkGO AUTO LOANS 2022.

Deal Name	EDCode	Country	Vintage	IPD	PCD	Uploaded	Loans	C.Bal (mm)
AutoFlorence 2 S.B.L.	AUTSIT000417100520215	Italy	2021		2024-08-31	2024-10-04	54659	306.55
BBVA RMBS 14 FTA	RMBSSE000060105120142	Spain	2014	2024-12-24	2024-09-24	2024-10-04	6189	253.9
Quatro Srl 2023	CMRSIT000265500220234	Italy	2023	2024-09-16	2024-08-31	2024-10-04	63860	622.25
Quatro Srl 2020	CMRSIT000265100820201	Italy	2020	2024-09-16	2024-08-31	2024-10-04	302537	369.11
Cars Alliance Auto Loans France Master	AUTMFR000101100320122	France	2012	2024-09-23	2024-08-31	2024-10-03	157522	1020.97
BPCE HOME LOANS FCT 2017_5	RMBSFR000083100620170	France	2017	2024-09-30	2024-08-31	2024-10-03	52884	3336.53
Volta VIII Electricity Receivables Securitisation Notes	OTHSP1102098500220232	Portugal	2023	2024-09-12	2024-08-31	2024-10-03	1	808.76
Rocky 1	CMRSIT000807100320219	Italy	2021	2024-09-30	2024-08-31	2024-10-03	391652	2378.57
CARS ALLIANCE AUTO LOANS SPAIN 2022_FT	AUTSE000060107520225	Spain	2022	2024-10-24	2024-09-24	2024-10-03	137344	1198.41
GB 2023-2 Golden Bar (Securitisation) S.r.l.	AUTSIT000296500120234	Italy	2023	2024-09-23	2024-08-31	2024-10-03	132883	907.72
GinkGO AUTO LOANS 2022	AUTSFR000452101820223	France	2022	2024-09-25	2024-08-31	2024-10-03	155447	654.55
GinkGO AUTO LOANS 2022	AUTSAT102425500120241	Austria	2024	2024-10-15	2024-10-01	2024-10-02	22965	529.4

- The cutting-edge tool consolidates all the features and functionalities that users previously accessed through EDITOR, SQL Access, and Deal Reports, into a single, comprehensive portal.
- EDVANCE allows you to easily access public & private securitisations and analyse data across ESMA and FCA templates.
- Manage your portfolios, query and analyse loan data using SQL, access our counterparty network and explore the benefits of EDW's AI Assistant, EDWARD

THE ALL NEW EDVANCE

ACCESS AND ANALYSE PUBLIC AND PRIVATE SECURITISATIONS SEAMLESSLY ON OUR ALL-NEW ALL-IN-ONE AI-POWERED PLATFORM

DEAL VIEWER

Explore a comprehensive overview of deals hosted on our platform

MY PORTFOLIO

Track multiple portfolios and subscribe to notifications & alerts

AI ASSISTANT

Chat with EDWARD, a natural-language-to-SQL AI Assistant that empowers your data analysis

COUNTERPARTY DATABASE

Get to know nearly 700 contacts and providers for thousands of deals

DATA REQUESTS

Get your portfolio's data delivered directly to you through email or SFTP

ANYTIME, ANYWHERE

Seamlessly access data without burdensome firewall settings & IT involvement.

COUNTERPARTY DATABASE

GET TO KNOW NEARLY 700 CONTACTS AND PROVIDERS FOR THOUSANDS OF DEALS

EDVANCE

EDCode, Securitisation Identifier, Deal Name or ISIN

Counterparty View

685 Counterparties

Search by Counterparty or Deal Name... Counterparty Type Select Country

Counterparty Name	Roles (#Deals)	Deals	LEI & Address
Barclays Bank UK PLC	CACB (19)	8	213800ULGANOMF9X769 1 CHURCHILL PLACE LONDON, E14 5HP United Kingdom
BANCA MEDIOCREDITO DEL FRIULI VENEZIA GIULIA S.P.A.	LQFP (1) ORIG (1) SERV (1) SUBS (1)	1	549300HQFOCKXWS4CJ46 VIA AQUILEIA 1 UDINE, 33100 Italy
ASSET-BACKED EUROPEAN SECURITISATION TRANSACTION FOURTEEN S.R.L.	ISSR (1)	1	815600CA09E26F515386 VIA V. ALFIERI, 1 CONEGLIANO, 31015 Italy
AUTONORIA SPAIN 2019, FT	ISSR (1)	1	959800QDWD3FK96ATG53 C/ Principe de Vergara 131 Planta 3 c/o INTERMONEY TITULIZACION SGFT SA Madrid, 28002 Spain
APEX GROUP HOLD CO (UK) LIMITED	BSRF (1)	1	8945002N56HQ3WGA883 6th Floor, 125 London Wall LONDON, EC2Y 5AS United Kingdom
"ACCOUNTING PARTNERS S.P.A." E IN FORMA ABBREVIATA "AP S.P.A."	REPN (10) BSRF (7) OTHR (4) CALC (2)	9	81560044C518C9189255 VIA MONTEBELLO, 27 MILANO, 20121 Italy
BAYERISCHE LANDESBANK		1	VDYMYTQGZZ6DU0912C88 BRIENNER STR, 18

- Our comprehensive counterparty database **includes over 50 types of contacts**—such as issuers, cash advance providers, and portfolio advisors—**covering nearly 700 European ABS transactions**.
- Users can **filter the database by country or deal name**, with results conveniently **displayed in list or map views**.

DEAL REPORTS

FIND DETAILED INFORMATION INCLUDING TIME SERIES DATA, BENCHMARKS AND STRATIFICATION TABLES

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EDVANCE

- Dashboard
- Deals
- Counterparties
- Edward AI Assistant
- SQL Workbench
- My Portfolio
- My Notebook
- My Data Requests
- My Alerts
- Logoff

EDCode, Securitisation Identifier, Deal Name or ISIN

Deals
Information
Downloads
Inv. Report Data
Asset Data
Stratifications

Active STS Energy-Efficient Restructured

PCD: 2024-10-31

Loan & Borrower Metrics

Total Loans	89,737
Active Loans	85,668
Active Collaterals	-
Active Borrowers	85,258
Top 10 50 Borrowers	0.11 0.11

Portfolio Performance Metrics

Original Balance	1,291,967,650.83
Current Balance	742,952,904.89
Cum. Prepayments	48,792,776.07
Cum. Recoveries	139,057.77
Non-Perf. Exposures	

Weighted Averages with Benchmarks

WA Interest Rate (%)	4.61
WA Seasoning (%)	23.66
WA CLTV (%)	-
WA OLTV (%)	73.70
WA RTM (%)	35.21

Delinquency Information for Loans classified as in Arrears

Days in Arrears	Loans	Current Balance	% CBal	% CBal Prev	Arr. Balance
1 - 29 Days	48	451,375.91	0.06	0.06	26,031.29 (0.06)
30 - 59 Days	129	1,320,532.61	0.18	0.14	74,208.36 (0.06)
60 - 89 Days	67	598,047.50	0.08	0.13	34,507.43 (0.06)
90 - 119 Days	38	383,085.63	0.05	0.02	30,725.56 (0.08)
120 - 149 Days	11	82,745.14	0.01	0.00	5,131.64 (0.06)
150 - 179 Days	2	3,235.38	0.00	0.00	934.43 (0.29)

Delinquency timeseries chart

EDWARD

OUR NEWEST TEAM MEMBER IS OUR LATEST INNOVATION

- Chat with EDWARD, a natural-language to-SQL AI Assistant that empowers your data analysis
- Eliminates the need for complex SQL training, saving time and resources

EDWARD

OUR NEWEST TEAM MEMBER IS OUR LATEST INNOVATION

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TJ You:
Weighted avg. interest rate for all French auto deals

ED Edward:

```
SQL Code
SELECT
  SUM(PR.AGGREGATES.weight_avg_int_rate_sumprod) /
  NULLIF(SUM(PR.AGGREGATES.weight_avt_int_rate_sum), 0) AS Weighted_Avg_Interest_Rate
FROM
  PR.AGGREGATES
JOIN
  STS.Deals ON PR.AGGREGATES.sec_id = STS.Deals.Sec_Id
WHERE
  PR.AGGREGATES.submission_rank = 1
  AND STS.Deals.Country_of_Assets = 'France'
  AND STS.Deals.Asset_Class = 'AUT'
  AND PR.AGGREGATES.IsPublished = 1
```

- It shows the result, and the SQL queries associated

Result
Weighted_Avg_Interest_Rate
5.798974

REPORTING SOLUTION FOR PRIVATE DEALS

MARKET OVERVIEW FOR PRIVATE TRANSACTIONS

**PRIVATE TRANSACTIONS
IN EDITOR**

**>300
TOTAL**

**100+
ISSUERS**

**12
COUNTRIES**

**11
ASSET CLASSES**

**PRIVATE SECURITISATIONS ON ESMA'S
STS REGISTER**

**327
TOTAL**

**284
ABCP**

**43
NON-ABCP**

Sources: EDW, ESMA

PRIVATE AREA OVERVIEW

PRIVATE SECURITISATION TRANSACTIONS USE THE EDW PRIVATE AREA TO COMPLY WITH DISCLOSURE REQUIREMENTS UNDER ART. 7 OF THE SEC. REG.

The screenshot displays the EDW Private Area interface. At the top, there is a navigation bar with 'EDITOR' and various menu items like 'HOME', 'UPLOADS', 'EU DEALS', 'UK DEALS', 'TICKETS', 'FINDINGS', 'DQM OVERVIEW', and 'CSV TO XML CONVERTER'. Below this is a search bar and a table of deals. The table has columns for Deal Name (SPV), EDCode, Asset Country, Vintage, IPD, PCD, Total Assets, C.Bal(mn), Sub Date, Template, and Action. The table lists several deals, including IT08461_IMP_01, IT01030_IMP_01, Progetto PMI 4, IT03493_LEA_01, IT06305_MUT_01, IT05297_IMP_01, and ACC SME National Bank of Greece S.A.

Deal Name (SPV)	EDCode	Asset Country	Vintage	IPD	PCD	Total Assets	C.Bal(mn)	Sub Date	Template	Action
IT08461_IMP_01	CCSSIT001044100320225	Italy	2022	NA	2024-09-30	655	117	2024-10-11	ECB	🔗 🗑️
IT01030_IMP_01	CCSSIT000094100620158	Italy	2015	NA	2024-09-30	21480	10476.2	2024-10-11	ECB	🔗 🗑️
Progetto PMI 4	SMESIT102112500420235	Italy	2023	2024-09-30	2024-08-31	674	527.05	2024-10-11	ESMA(UJ,IR,II)	🔗 🗑️
IT03493_LEA_01	CCLSI102362100220218	Italy	2021	NA	2024-09-30	45	60.4	2024-10-11	ECB	🔗 🗑️
IT06305_MUT_01	CCRSIT102811100120239	Italy	2023	NA	2024-09-30	2919	267.8	2024-10-11	ECB	🔗 🗑️
IT05297_IMP_01	CCSSIT102743100120232	Italy	2023	NA	2024-09-30	1005	267	2024-10-11	ECB	🔗 🗑️
ACC SME National Bank of Greece S.A.	CCSSGR001005100120202	Greece	2020	NA	2024-09-30	1131	250.4	2024-10-11	ECB	🔗 🗑️
IT01030_MUT_01	CCSSIT000094100620158	Italy	2015	NA	2024-09-30	21480	10476.2	2024-10-11	ECB	🔗 🗑️

- **Accessibility:** Easy and user-friendly web-based access.
- **Functionality:** Continuous software enhancements and developments.
- **Reliability:** Robust software with ongoing support.
- **Integrity:** Legal framework for accessing, uploading and downloading information.

PRIVATE AREA PRINCIPALS

EDITOR ENABLES PRIVATE TRANSACTIONS TO COMPLY WITH THE DISCLOSURE REQUIREMENTS UNDER ARTICLE 7(1) OF THE SECURITISATION REGULATION

STORAGE OF RELEVANT DATA

EDW regularly collects documentation and data according to the ECB and newly implemented ESMA templates and taxonomies with tailor made solutions upon request. **The data is stored in the system for at least 5 years.**

SECURITY AND TRACKING

Once the deal is created, EDW keeps a clear log of the uploads, downloads and a full data back-up for future recovery.

TRANSPARENCY

Access to the relevant data is fully managed by the authoriser Data Owner who is responsible for granting the access to third parties called Data Users (DU). The authorisation can be changed at any time.

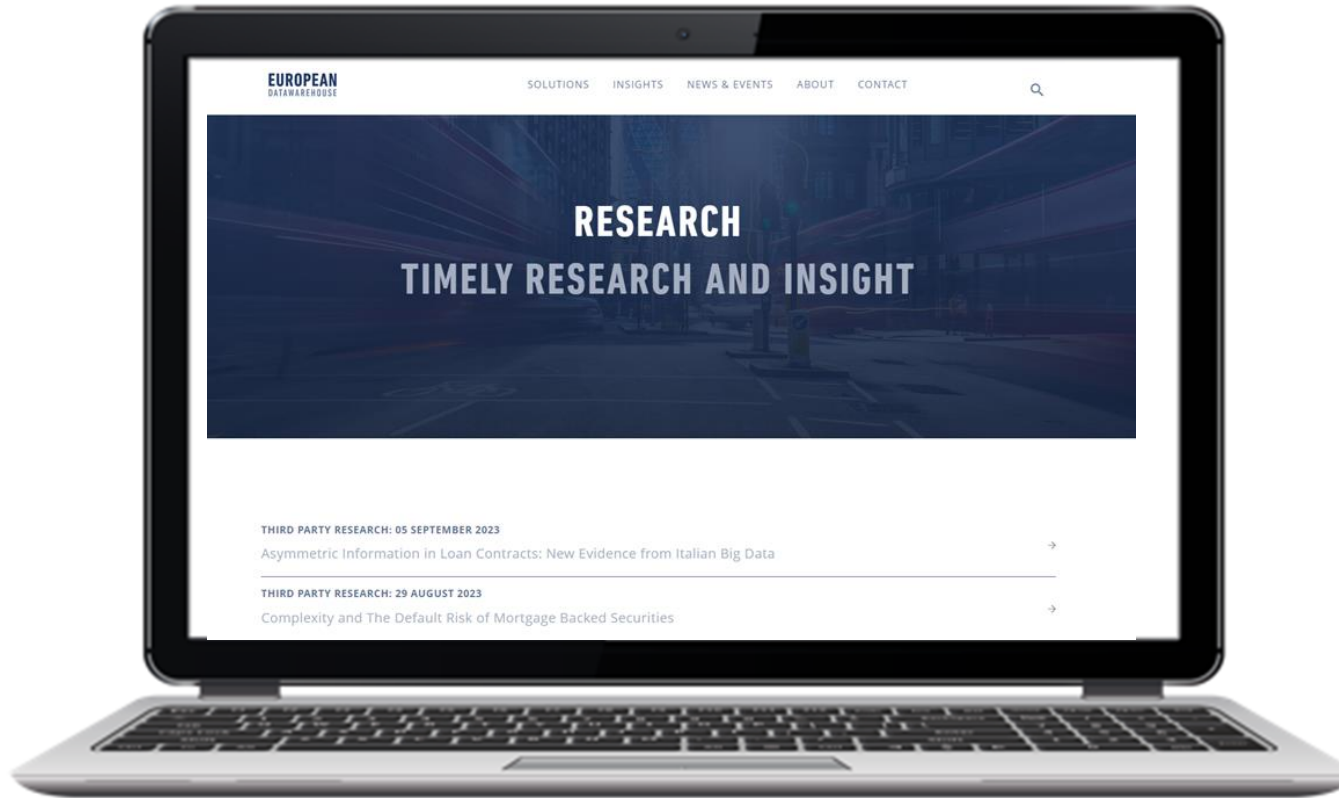


EDW RESEARCH

LUDOVIC THEBAULT, EUROPEAN DATAWAREHOUSE

EDW RESEARCH SECTION

OUR OWN PUBLICATIONS PLUS THIRD-PARTY RESEARCH: [HTTPS://EURODW.EU7KNOWLEDGE/RESEARCH](https://eurodw.eu7knowledge/research)



LIST OF RESEARCH PUBLICATIONS

OUR OWN PUBLICATIONS PLUS THIRD-PARTY RESEARCH: [MEDIA LIBRARY](#) - [EUROPEAN DATAWAREHOUSE \(EURODW.EU\)](#)



VIDEOS

What is European DataWarehouse?

European DataWarehouse on the Securitization Regulation (condensed version)

European DataWarehouse on the Securitization Regulation (full length version)

European DataWarehouse on the Securitization Regulation (versión reducida en español)

European DataWarehouse sobre el nuevo reglamento de titulación (versión completa en español)

[SHOW MORE](#)

CORPORATE INFORMATION AND PUBLICATIONS

19 AUGUST 2022
Corporate Presentation

YEAR	MONTH	TITLE	PUBLISHER	PUBLICATION TYP.	KEYWORDS	ACCESSIBLTY	EDW/THIRD PARTY
2022	July	European Systemic Risk Board (ESRB) Monitoring System for ESRB	ESRB	Central bank publication	Systemic risk, securitization	Direct	Central bank
2022	June	Spring 2022 Research Bulletin	EDW (Guest speaker from University of Waterloo)	Webinar	Loan performance, data availability, energy performance, adjusted	Direct	EDW
2022	June	Financial Sustainability Disclosure paper on the implementation of the Sustainable Finance Disclosure Regulation	Central bank publication	ESG, financing transactions		Direct	Central bank
2022	May	Weekly Analytics, Condensed Series of the U.S. Mortgage Market	Moody's	Data comment	ESMA reporting standards	Restricted	Rating agency
2022	April	Introducing the EDR adjusted Database	EDW	Webinar	Adjusted database	Direct	EDW
2022	February	May Year 2022 Research Bulletin	EDW	Webinar	Loan performance, energy performance, adjusted database, CO2	Direct	EDW
2022	February	ESG Scores 2021 (condensed version) (version condensada) 27th Jan 2022	AMF	Data comment	ESG, sustainable finance, data availability	Direct	Others
2021	December	ESMA 2021 Research Bulletin	EDW (Guest speaker from European Central Bank)	Webinar	Loan defaults, machine learning, RMBS prepayments, forecasting	Direct	EDW
2021	November	ESMA 2021 - from the ESRB/ESMC European Mortgage Loan	ESRB/ESMC (EDW & HYPOSTAT)	COVID impact	COVID impact, mortgages	Direct	Others
2021	October	Journal of Financial Economics: Forecasting Loan Defaults in	Journal of Financial Economics	Academic publication	machine learning	Direct	Academic Publication
2021	September	Spring 2021 Research Bulletin	EDW	Webinar	COVID, mortgages, credit risk and COVID	Direct	EDW
2021	May	Spring 2021 Research Bulletin	EDW	Webinar	Data availability, COVID, energy efficiency, payment holidays	Direct	EDW
2021	May	Journal of Real Estate Finance & Economics: Mortgage Defaults	The Journal of Real Estate Finance & Economics	Academic publication	mortgage defaults, energy efficiency	Direct	Academic Publication
2021	May	Data Availability Report 24 2020	EDW	Data comment	Data availability	Direct	EDW
2021	March	Monitoring the impact of COVID-19 on 2021 RMBS Issues	EDW	COVID impact	COVID impact, mortgages	Direct	EDW
2021	February	Monitoring the impact of COVID-19 on 2021 RMBS Tranche	EDW (Guest speaker from European Central Bank)	Webinar	COVID, RMBS performance, loan amortisation, cover your assets	Direct	EDW
2020	December	COVID-19 Impact	EDW	Webinar	COVID, loan performance, payment holiday, reporting practices	Direct	EDW
2020	December	COVID-19 RMBS Issuance Report	EDW	COVID impact	COVID impact, auto loans, mortgages	Direct	EDW
2020	December	COVID-19 Impact of Systemic Risks: Reporting Practices in U.S.	EDW	COVID impact	COVID impact, mortgage	Direct	EDW
2020	November	Weekly Analytics COVID-19: 30th View of the Dutch Mortgage Market	Moody's	COVID impact	COVID impact, Netherlands mortgages	Restricted	Rating agency
2020	November	Weekly Analytics, Condensed Series of the U.S. Mortgage Market	Moody's	Credit research	COVID impact, mortgages	Restricted	Rating agency
2020	November	Monitoring the impact of COVID-19 on 2020 RMBS Tranche	EDW	COVID impact	COVID impact, mortgages, auto loans	Direct	EDW
2020	September	Weekly Analytics Report	EDW	COVID impact	COVID impact, implied payment holidays	Direct	EDW
2020	August	Monitoring the impact of COVID-19 on 2020 RMBS Tranche	EDW	COVID impact	COVID impact, mortgages	Direct	EDW
2020	July	Market Risks and Related Derivatives: The Impact of COVID-19	Academic Publication	Academic publication	security design, asset backed securities, reversion, moral hazard	Direct	Academic Publication
2020	June	Threats Managers' Speech to the European Parliament and Bank for Italy	Academic Publication	Academic publication	TFRD, Unconventional Monetary Policy, Credit Risk, Bank Capital	Direct	Academic Publication
2020	June	Monitoring the impact of Covid-19 on 2020 report	EDW	COVID impact	Free time delinquencies, auto, consumer loans, RMBS	Direct	EDW
2020	February	ESG Scores and Statistics	EDW	Data comment	Reporting, data integrity	Direct	EDW
2019	December	ESG Analysis Action 2.2 and 2.1	EDW	Data comment	ESMA data vs ECR data	Direct	EDW
2019	November	RMBS Index Insights from European DataWarehouse	EDW	Data comment	RMBS Index Spain	Direct	EDW
2019	November	Index ESG Index	EDW	ESG performance	Index, ESG, performance	Direct	EDW
2019	October	ESB: The Impact of Reporting Standards on Default Rates of Issuers	ESB	Central bank publication	loan defaults, lending standards, residential real estate, bank loan	Direct	Central bank

LIST OF RESEARCH PUBLICATIONS

INVENTORY OF EDW-RELATED PUBLICATIONS

YEAR	MONTH	TITLE	PUBLISHER	PUBLICATION TYPE	KEYWORDS	ACCESSIBILITY
2023	April	Understanding EDW's Loan Identifier Recurrence Score	EDW	Special Report	Loan ID Recurrence, Borrower ID Consistency, Data Quality	Direct
2023	January	European Auto ABS: Have Delinquencies Hit Book Bottom?	DBRS	Credit research	European auto asset-backed securities (ABS)	Direct
2023	January	Impact of Rising Rates on UK Mortgages	DBRS	Credit research	UK Mortgages	Direct
2022	October	Navigating the housing channel of monetary policy across euro area regions	European Central Bank (ECB)	Credit research	housing market, business cycles, regional inequality	Direct
2022	October	European Benchmarking Exercise (EBE) for Private Securitisation	AFME/EDW/TSI	EBE	Private securitisation market	Direct
2022	October	Swiss Finance Institute: Do Lenders Price the Brown Factor in Car Loans?	Swiss Finance Institute	Academic publication	loan level data, Diesel vehicles	Direct
2022	September	DBRS Morningstar Commentary on European Auto ABS: German Portfolios Transition to Alternatively Fuelled Vehicles	DBRS	Credit research	European Auto ABS	Restricted
2022	August	Matteo Beretton, Sergio Masordomo, Daniel Paravizini - Credit Fire Sales: Captive Lending as Liquidity in Distress	Academic publication	Academic publication	Captive Finance, Fire Sales, Vertical Integration, Liquidity	Direct
2022	July	European Systemic Risk Board (ESRB) Monitoring Systemic Risks in the EU Securitisation Market	ESRB	Central bank publicati	Systemic risk, securitisation	Direct
2022	June	Spring 2022 Research Webinar	EDW (Guest speaker from Universitat	Webinar	Loan performance, data availability, energy performance, adjusted	Direct
2022	June	Deutsche Bundesbank discussion paper on the replenishment of ABS backed by SME loans	Deutsche Bundesbank	Central bank publicati	ABS SME, revolving transactions	Direct
2022	May	Moody's Investors Service: ESMA rules will raise data quality, but additional fields would aid credit analysts (originally published 7 May 2020)	Moody's	Data comment	ESMA reporting standards	Restricted
2022	April	Introducing the EDW adjusted Database	EDW	Webinar	Adjusted database	Direct
2022	February	New Year 2022 Research Webinar	EDW	Webinar	Loan performance, energy performance, adjusted database, CO2	Direct
2022	February	AFME Report: ESG securitisation issuance increases 273% from 2020 to 2021	AFME	Data comment	ESG, sustainable finance, data availability	Direct
2021	December	Winter 2021 Research Webinar	EDW (Guest speaker from European	Webinar	Loan defaults, machine learning, RMBS prepayments, forecasting	Direct
2021	November	Hypostat 2021 - From the EMF-ECBC (European Mortgage Federation - European Covered Bond Council)	EMF/ECBC (EDW in HYPOSTAT)	COVID Impact	COVID impact, moratoria, mortgages	Direct
2021	October	Journal of Financial Econometrics: Forecasting Loan Default in Europe with Machine Learning	Journal of Financial Econometrics	Academic publication	mortgage defaults, machine learning	Direct
2021	September	Summer 2021 Research Webinar	EDW	Webinar	COVID, moratoria, credit risk and COVID	Direct
2022	May	Spring 2021 Research Webinar	EDW	Webinar	Data availability, COVID, Energy efficiency, payment holidays,	Direct
2021	May	Journal of Real Estate Finance & Economics: Buildings' Energy Efficiency & the Probability of Mortgage Default - The Dutch Case	The Journal of Real Estate Finance	Academic publication	mortgage defaults, energy efficiency	Direct
2021	May	Data Availability Report Q1 2020	EDW	Data comment	Data availability	Direct
2021	March	Monitoring the Impact of COVID-19: Q1 2021 RMBS Report	EDW	COVID Impact	COVID impact, moratoria, mortgages	Direct
2021	February	New Year 2021 Research Webinar	EDW (Guest speaker from European c	Webinar	COVID, RMBS performance, Loan amortisation, Cover your assets	Direct
2021	February	Monitoring the Impact of COVID-19: Q1 2021 RMBS Tracker	EDW	COVID Impact	COVID impact, moratoria, mortgages	Direct
2020	December	COVID-19 Webinar	EDW	Webinar	COVID, loan performance, payment holiday, reporting practices	Direct
2020	December	COVID-19: Who Has Benefited Most from COVID-EBA Auto Loan Extensions?	EDW	COVID Impact	COVID impact, auto loans, mortgages	Direct
2020	December	COVID-19: Survey of Payment Holiday Reporting Practices in Europe	EDW	COVID Impact	COVID impact, moratoria	Direct
2020	November	Moody's Analytics: COVID-19: 360° View of the Dutch Mortgage Market	Moody's	COVID Impact	COVID impact, Netherlands mortgages	Restricted
2020	November	Moody's Analytics: Continued Stress of the U.K. Mortgage Market	Moody's	Credit research	COVID impact, mortgages	Restricted
2020	November	Monitoring the Impact of COVID-19: Q4 2020 AUTO Tracker	EDW	COVID Impact	COVID impact, moratoria, auto loans	Direct
2020	September	Household Debt and Economic Growth in Europe	SSRF	Academic publication	Household Debt, Great Recession, Economic Growth	Direct
2020	September	Credit Performance Review	EDW	COVID IMPACT	COVID impact, implied payment holidays	Direct
2020	August	Monitoring the Impact of COVID-19: Q3 2020 SMBS Tracker	EDW	COVID Impact	COVID impact, moratoria, mortgages	Direct
2020	July	Martin Hübner and Werner Oesterkamp: The Impact of Skin in the Game on Bank Behavior in the Securitisation Market	Academic Publication	Academic publication	security design, asset-backed securities, retention, moral hazard,	Direct
2020	June	Thomas Flanagan: Stealth Recapitalization and Bank Risk Taking: Evidence from TLTROs	Academic Publication	Academic publication	TLTRO, Unconventional Monetary Policy, Credit Risk, Bank Capti	Direct
2020	June	Monitoring the impact of Covid-19: Q2 2020 report	EDW	COVID Impact	First time delinquencies, auto, consumer, leases, RMBS	Direct
2020	February	Data Timing and Timeliness	EDW	Data comment	Reporting lag, data timeliness	Direct
2019	December	Gap analysis version 3.0 and 3.1	EDW	Data comment	ESMA data vs ECB data	Direct
2019	November	IFPH Index: Insight from European Datawarehouse	EDW	Data comment	IFPH Index Spain	Direct
2019	November	Italian SME Index	EDW	SME performance	Italy, SME, performance	Direct
2019	October	ECB: The Impact of Lending Standards on Default Rates of Residential Real Estate Loans	ECB	Central bank publicati	loan defaults, lending standards, residential real estate, loan-level	Direct
2019	October	Bank of Spain: Beyond the LTV Ratio: New Macroeconomic Lessons from Spain	Bank of Spain	Central bank publicati	housing market, lending standards, defaults, macroprudential poli	Direct
2019	October	Framing Bias in Mortgage Refinancing Decisions and Monetary Policy Pass-Through	Academic Publication	Academic publication	reference points, mortgage refinancing, household finance, inter	Direct
2019	September	Data Availability Report (2019 - Q1 Fiscal)	EDW	Data comment	Data availability, ABS, SME, RMBS, Auto, Leases, Consumer	Direct

RECENT PUBLICATIONS: HYPOSTAT 2024 ARTICLE (1)

SHORT ARTICLES ON CURRENT TOPICS: H24_IEECR_V2_FINAL.PDF (EURODW.EU)

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IS ENERGY EFFICIENCY CREDIT RELEVANT?

Is Energy Efficiency Credit Relevant?

By Ludovic Thebault, PhD and Usman Jamil, European DataWarehouse

In this article, using a sample of securitised mortgages from France and the Netherlands, we find evidence that the energy efficiency rating of properties is credit relevant to some extent, particularly for borrowers in the lower income categories. We believe that the implementation of the European Parliament's new Energy Performance of Buildings Directive will make it even more so.

The Energy Performance of Buildings Directive (EPBD) aims to decarbonise the European building stock. Considering that "Buildings account for 40% of final energy consumption in the Union and 36% of its energy-related greenhouse gas emissions while 75 % of Union buildings are still energy-inefficient", the new EPBD aims to pave the way for a wave of renovations and includes stringent environmental criteria for future new buildings. The most striking goal stated in the EPBD is that "all new buildings should be zero-emission buildings by 2030, and existing buildings should be transformed into zero-emission buildings by 2050". This ultimate drive for energy efficiency follows from a long history starting with the oil shocks in the 1970s, when the main goal was to reduce reliance on energy imports

owners.¹ As for the disincentives, increasing constraints will apply to the worst-rated buildings, including letting bans for the most inefficient properties.² Letting bans interrupt the stream of income for 'buy to let' properties and force borrowers to borrow an extra lump amount to upgrade the property (a credit negative). Properties' Energy Performance Certificate (EPC)³ ratings will thus become more relevant when originating new mortgages. In this article however, we argue that EPCs may already have been relevant so far, particularly for the most vulnerable households.

EDW hosts data for European securitised mortgages and recently started to collect EPC ratings.⁴ We focus this study on the Netherlands and France, which are the countries where this data is the most available. We did not want to mix EPCs across countries, because the EPC mix can be radically different from one country' to the next and because EPCs can have very different meanings across countries; in France, a property with an EPC-A rating can use up to 70 kWh/m²/year vs. up to 160 kWh/m²/year in the Netherlands.⁵

RECENT PUBLICATIONS: HYPOSTAT 2024 ARTICLE

PUBLISHED IN THE NEW HYPOSTAT: [HTTPS://EURODW.EU/WP-CONTENT/UPLOADS/H24_IEECR_V2_FINAL.PDF](https://eurodw.eu/wp-content/uploads/H24_IEECR_V2_FINAL.PDF)

EXHIBIT 1a | MORTGAGES FINANCING THE LEAST EFFICIENT PROPERTIES PERFORM WORST IN FRANCE
Cumulative delinquencies by EPC (France - Mortgages) – As % of Original Balance, Months after Origination

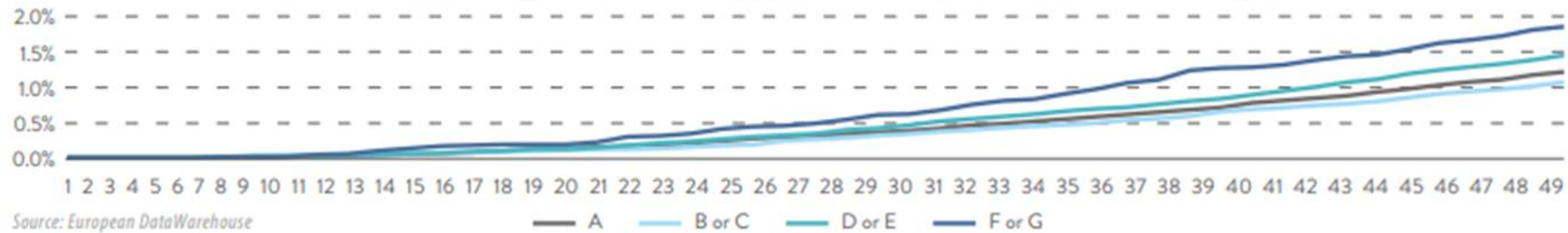
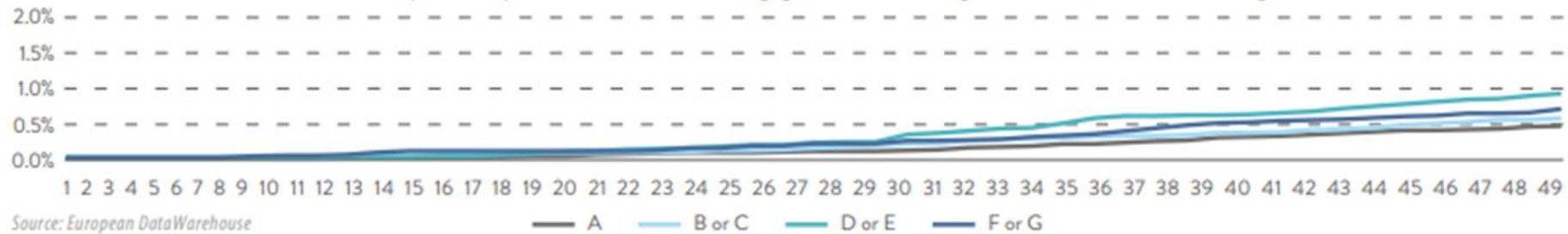


EXHIBIT 1b | PAYMENT INCIDENTS IN THE NETHERLANDS ARE ALSO MORE COMMON FOR EPC D-G
Cumulative delinquencies by EPC (Netherlands - Mortgages) – As % of Original Balance, Months after Origination



RECENT PUBLICATIONS: EBE REPORT H2 2023

REPORT ON PRIVATE SECURITISATIONS CO-AUTHORED WITH AFME AND TSI: [HTTPS://EURODW.EU/WP-CONTENT/UPLOADS/H24_IEECR_V2_FINAL.PDF](https://eurodw.eu/wp-content/uploads/H24_IEECR_V2_FINAL.PDF)

Table 1 – Overview

		2023-12	2023-06	2022-12	2022-06	2021-12	2021-06	Δ_p
Number of Participants	#	12	12	12	12	12	12	0.0%
Number of Commitments	#	610	610	556	525	527	504	0.0%
Committed Amount	Million EUR	79.424	78.590	73.182	67.241	65.064	62.814	1.1%
Funded Amount	Million EUR	59.111	57.748	60.502	56.400	53.009	50.205	2.4%
Utilisation	%	74.4%	73.5%	82.7%	83.9%	81.5%	80.0%	1.3%
Total Asset Amount	Million EUR	203.859	195.524	184.159	183.326	173.016	177.329	4.3%
Estimated Market Size	Million EUR	231.040	209.400	195.669	194.784	183.830	188.412	4.3%
Number of Transactions	#	457	443	433	412	387	404	3.2%

Δ_p =growth in last period

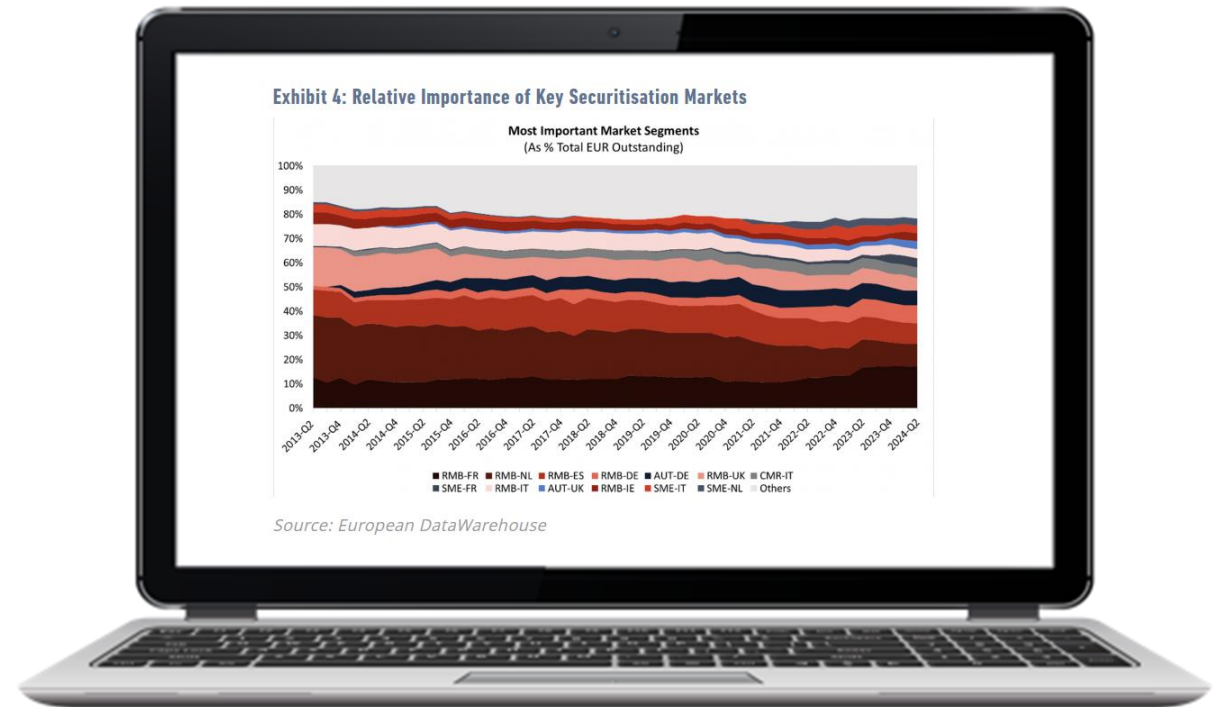
BLOG

SHORT ARTICLES ON CURRENT TOPICS: [HTTPS://EURODW.EU/KNOWLEDGE/MAGAZINE//](https://eurodw.eu/knowledge/magazine/)



LATEST BLOGS

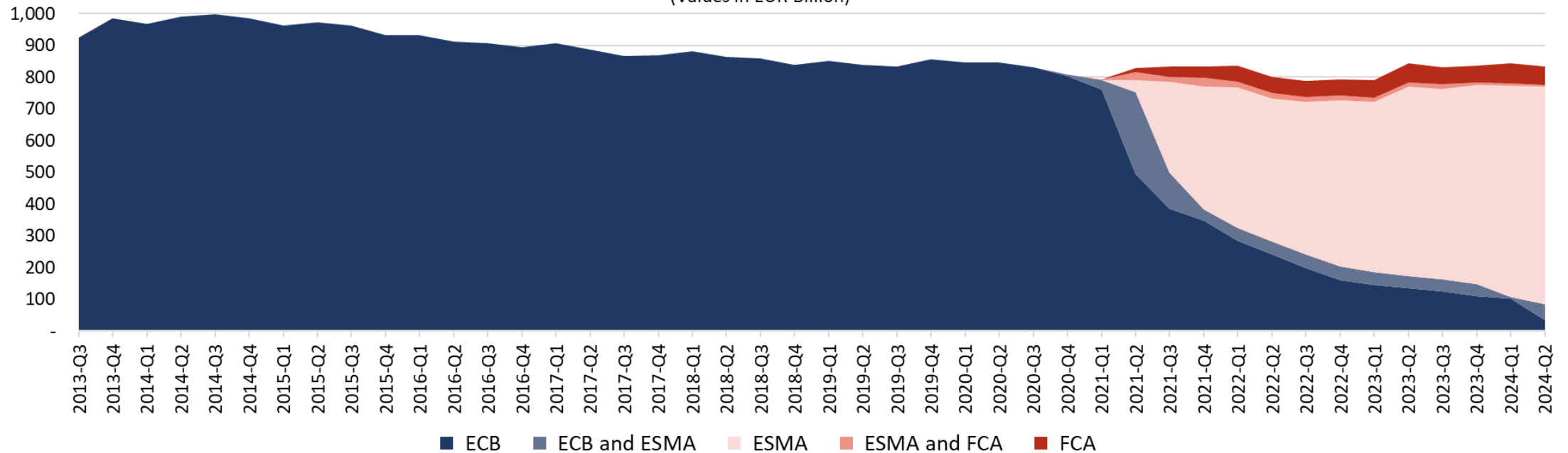
<p>DATA IN USE 20.11.2024 Data Deep Dive: EDW's Public Securitisation Data Now Totals Nearly €835 Billion</p>	<p>SECURITISATION REGULATION 26.09.2024 The Draghi Report: What 'The Future of European Competitiveness' Means for Securitisation</p>	<p>ESG 05.07.2024 Significant Changes to the CO₂ labelling Ordinance for Cars in Germany</p>
<p>DATA IN USE 11.06.2024 Revisiting 'The Babel Tower Of EPC Ratings': Updated Thresholds Across Europe</p>	<p>SECURITISATION REGULATION 29.05.2024 EBA Publishes Guidelines on STS Criteria for On-Balance-Sheet Securitisations</p>	<p>SECURITISATION REGULATION 10.05.2024 The new UK Securitisation Regulation Framework comes into effect on 1 November 2024</p>
<p>ESG 08.06.2024 A Year in Review: EDW Continues its Efforts on the Green Auto Securitisation Project</p>	<p>COMPANY BULLETIN 18.03.2024 Leveraging CRI Indices for Benchmarking Purposes</p>	<p>COMPANY BULLETIN 28.02.2024 Everything You Need to Know About EBA's Proposal for a Voluntary EU Green Loan Label</p>



EDW DATA INVENTORY (1)

REPORT ON DATA AVAILABILITY BLOG AND EXCEL

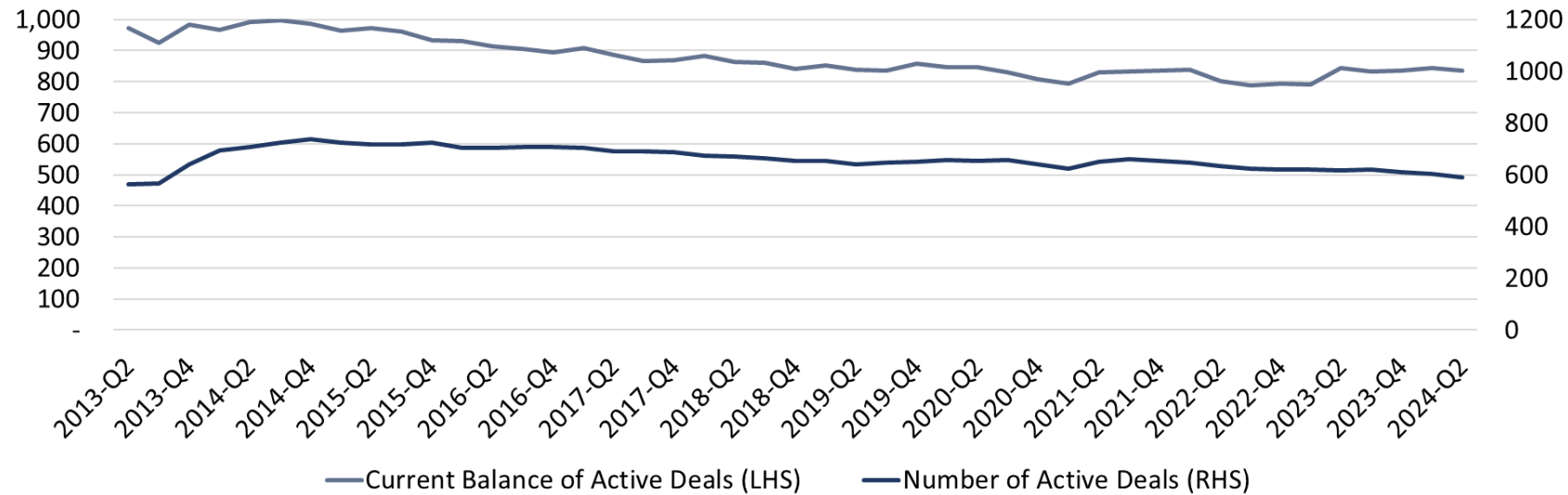
ALL ABS - PUBLIC DEALS ONLY
(Values in EUR Billion)



EDW DATA INVENTORY (2)

REPORT ON DATA AVAILABILITY BLOG AND EXCEL

Number Of Active Deals vs EUR Amount
(Amounts in EUR Billions)



STUDY ON THE CLIMATE RISK & IMPACT OF AUTO ABS

MAXIME BARTHE, BANQUE DE FRANCE

Exploratory study on the Climate Risk & Impact of Auto ABSs

Maxime Barthe and students from the ENPC

12 November 2024

DISCLAIMER

These slides and the associated report reflect the opinions of the authors and do not necessarily express the views of the Banque de France or the Ecole Nationale des Ponts & Chaussées.

Focus on Auto ABSs

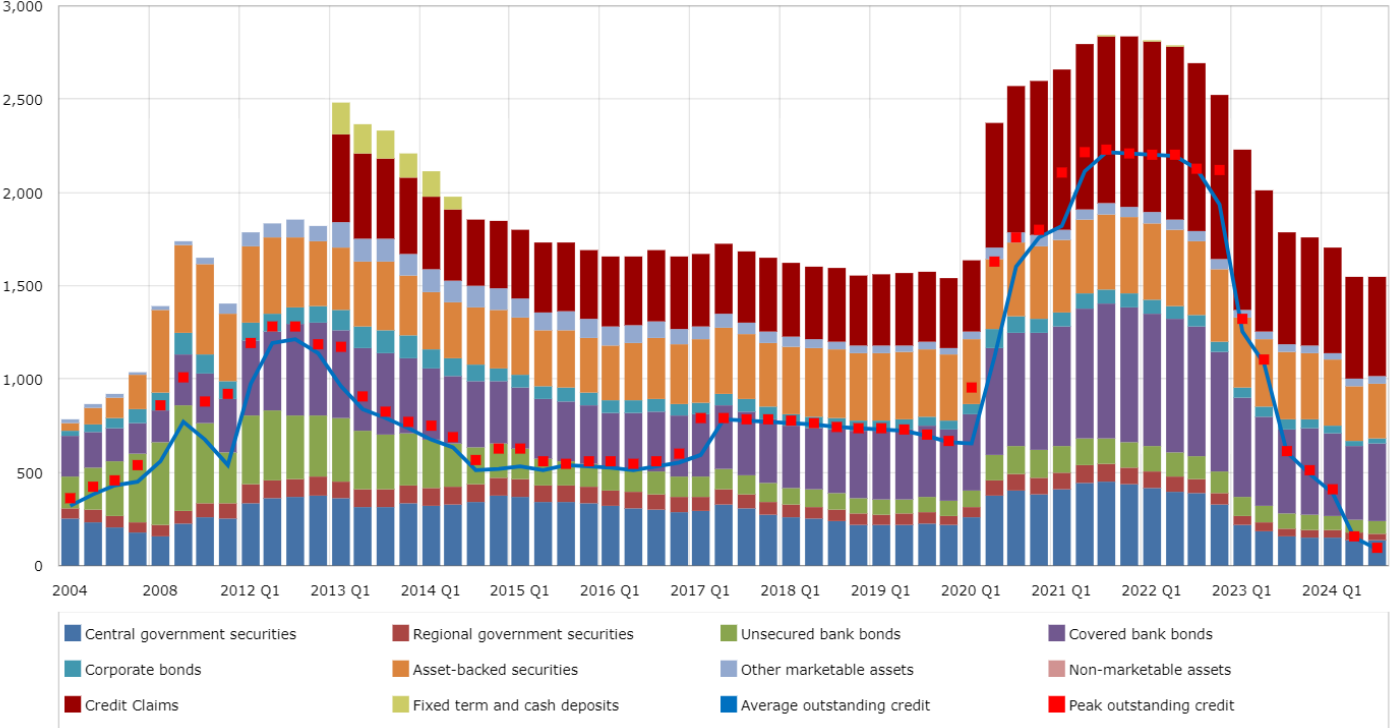
Main types of ABS pledged as collateral:

- RMBS
- Auto ABS

Auto ABSs

- Around 10% of Eurosystem collateral
- Intuitively mostly transition risks

Use of Collateral and Outstanding Credit



ABSs pledged as collateral represented around 292 billion euros at the end of the 2024 Q3. Source: Eurosystem collateral data (ECB)

Key points of the project

A basis for our research

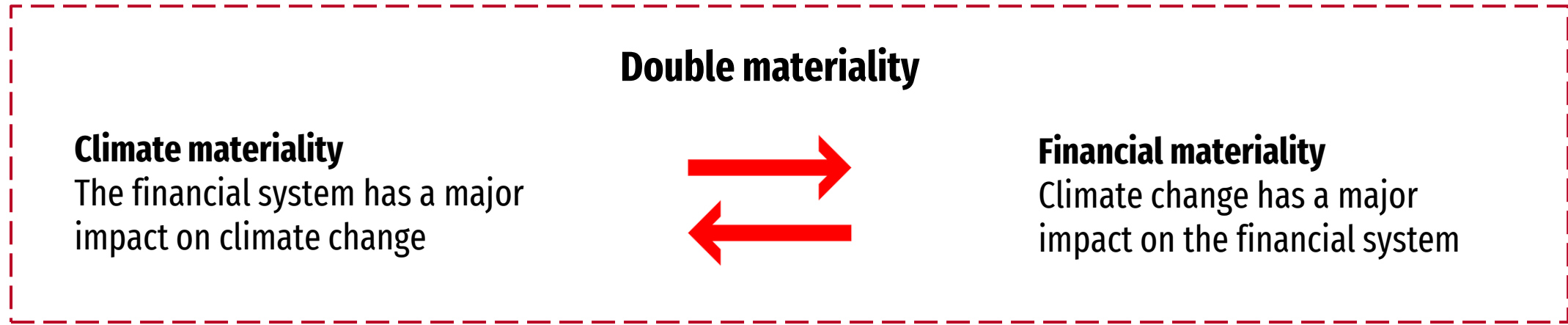
Loris André et al. *Climate Risk Measurement of Assets Eligible as Collateral for Refinancing Operations – Focus on Asset Backed Securities (ABS)* :

A theoretical framework to study climate risks

Our research contributions

- An exploration of the data available on Auto ABSs ; identification of bias, better understanding of these assets, highlight the need for completeness
- Building on previous work, metrics to measure climate risks and impacts of Auto ABSs

Several challenges for central banks



We must therefore be able to :

- **Quantify climate risks of Auto ABSs,**
- **Quantify climate impacts of Auto ABSs.**

At the heart of EDW data

Financial data

- Many metrics
- Coverage rates close to 100%
- Weak links with climate data

Autos data

- One major metric : the Energy Performance Certificate (EPC)
- Other metrics : brand, model, new or used, etc
- Low coverage rates for EPCs, inconsistencies in the formatting of other fields

Use of EPCs

We consider the emissions, in gCO₂/km, of each loans in order to assess the climate risks and impacts of ABSs, while taking into account the country of origin

	A	B	C	D	E	F	G
DBRS assumptions for french ABS	50,5	110,5	130,5	150,5	180,5	225,5	300
DBRS assumptions for german ABS	57,9	131,1	146,6	162	177,4	192,8	275,3

CO₂ emissions in France and Germany according to DBRS (gCO₂/km). Source: (DBRS, 2022)

A first solution to deal with the low coverage rates of EPCs

The goal is to progressively penalise the lack of coverage:

Methodology : Impute an EPC « D » to the first 10 % uncovered rows, a « E » to the next 20 %, a « F » to the following 20 % and a « G » for the remaining 50 % after.

Example : For an ABS which has an EPCs' coverage rate of 22%, we impute the 78 % of uncovered rows with 10 % of DPE D, 20 % DPE E, 20 % DPE F and 28 % EPC G.

Proposed metrics

General Emission Average

$$\text{GEA} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times e_l$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Impact

$$\text{NTE-I} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Risk

$$\text{NTE-R} = \sum_{l=1}^N \frac{\text{outstanding}_l}{\sum_{i=1}^N \text{outstanding}_i} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

Proposed metrics

General Emission Average

$$\text{GEA} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times e_l$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Impact

$$\text{NTE-I} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Risk

$$\text{NTE-R} = \sum_{l=1}^N \frac{\text{outstanding}_l}{\sum_{i=1}^N \text{outstanding}_i} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

- N is the number of loans within the collateral pool of the ABS
- e_l indicates the emissions of vehicle l derived from its EPC
- loan_l is the initial value of the loan l
- val_l is the initial value of the vehicle l
- \bar{e}_l is the average emissions of the vehicle category to which the vehicle l belongs
- outstanding_l is the current outstanding amount of loan l

Proposed metrics

Climate materiality

Key assumption: when a loan finances x% of a vehicle's value, it is responsible for x% of its emissions

Financial materiality

Key assumption: the neutral temporal emissions of a vehicle is a proxy for its transition risks

General Emission Average

$$\text{GEA} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times e_l$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Impact

$$\text{NTE-I} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Risk

$$\text{NTE-R} = \sum_{l=1}^N \frac{\text{outstanding}_l}{\sum_{i=1}^N \text{outstanding}_i} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

- N is the number of loans within the collateral pool of the ABS
- e_l indicates the emissions of vehicle l derived from its EPC
- loan_l is the initial value of the loan l
- val_l is the initial value of the vehicle l
- \bar{e}_l is the average emissions of the vehicle category to which the vehicle l belongs
- outstanding_l is the current outstanding amount of loan l

Proposed metrics

General Emission Average

$$\text{GEA} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times e_l$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Impact

$$\text{NTE-I} = \frac{1}{N} \sum_{l=1}^N \frac{\text{loan}_l}{\text{val}_l} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

Neutral Temporal Emission-Risk

$$\text{NTE-R} = \sum_{l=1}^N \frac{\text{outstanding}_l}{\sum_{i=1}^N \text{outstanding}_i} \times (e_l - \bar{e}_l)$$

Derived from (André et al., 2022)

These 3 metrics allow us to compare ABSs

- We classify ABSs into four climate performance categories. We rate the climate impact of ABSs from A to D based on the two first metrics: GEA and NTE-I.
- We rate the transition risks of ABSs from 1 to 4 based on their NTE-R.

ABSs ranking

Score	A	B	C	D	Total
1	13	2	0	1	15
2	3	21	4	0	28
3	0	0	28	9	37
4	0	0	2	2	4
Total	16	23	34	12	85

French and german ABS in each category

Score	A	B	C	D	Total
1	4,830019333	0	0	0	4,830019333
2	2,185001742	5,860979464	15,90969141	0	23,95567262
3	0	0	13,25216412	9,540633881	22,79279801
4	0	0	1,499999598	1,291301198	1,291301198
Total	7,015021075	5,860979464	30,66185513	10,83193508	54,36979075

Sum of outstanding amounts for each category (in billion of euros)

The majority of data is gathered around the diagonals of the tables, confirming the link between transition risks and climate impacts of Auto ABSs

Conclusion

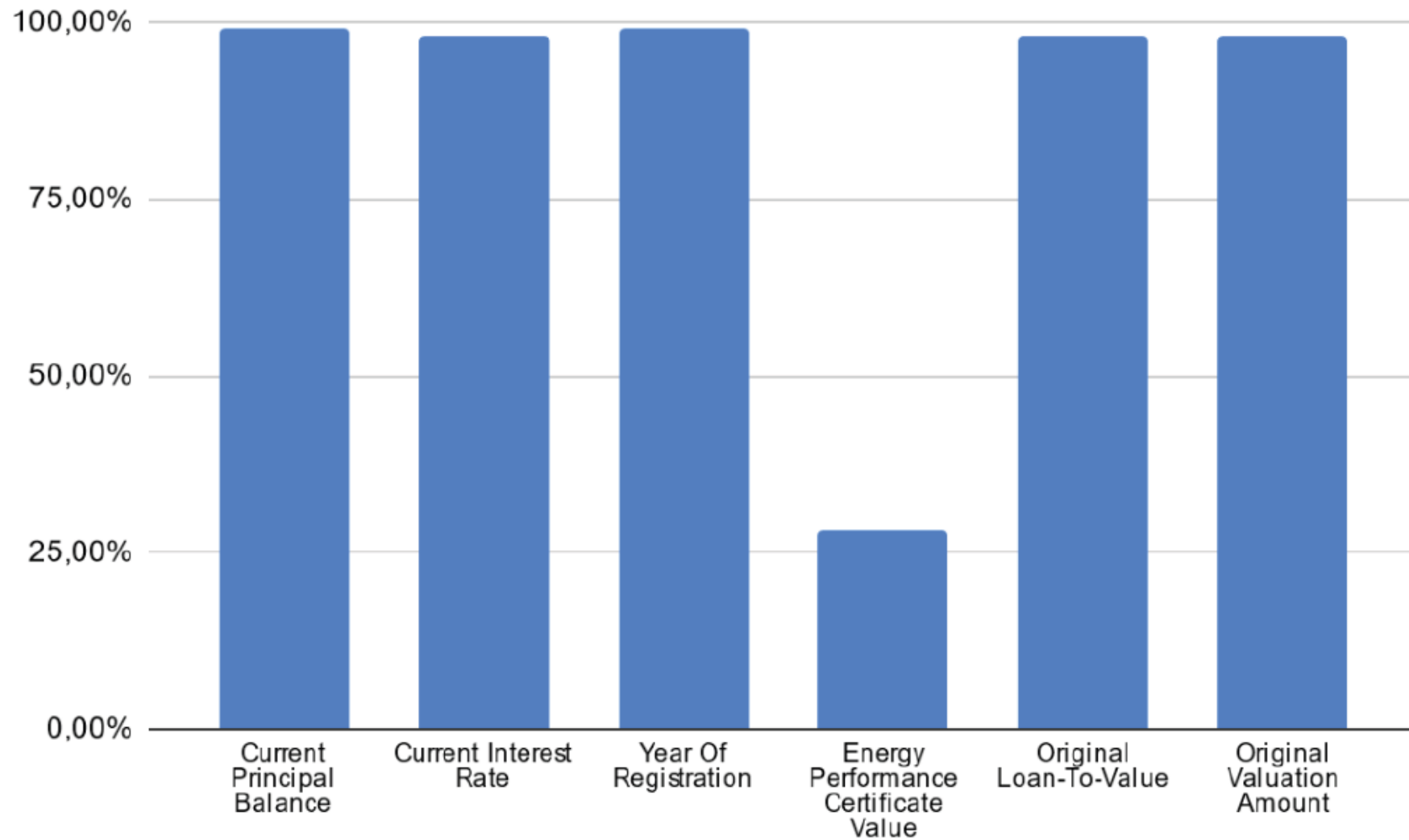
Maxime Barthe and students from the ENPC

12 Novembre 2024

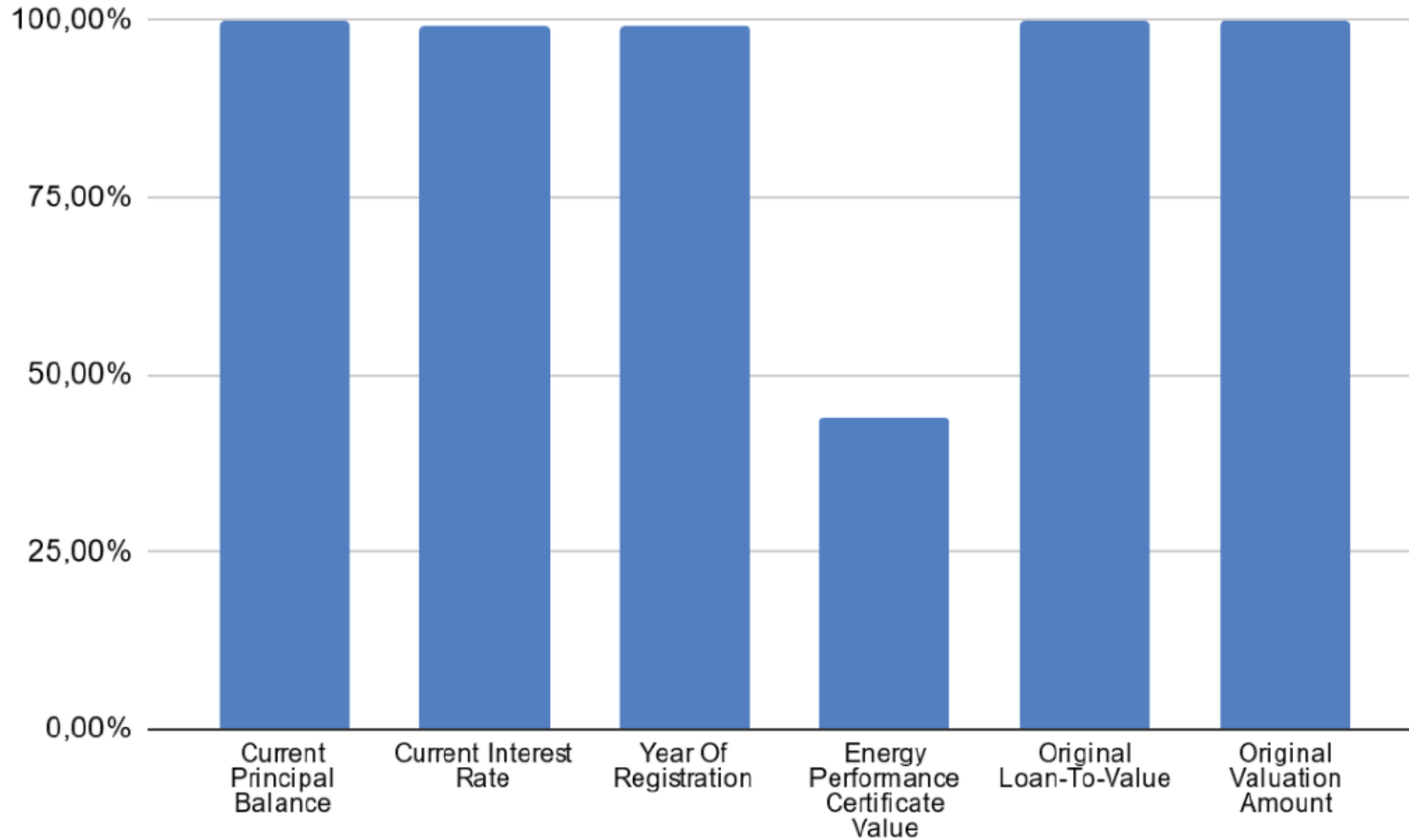
Bibliography

- DBRS Morningstar. “European Auto ABS: Auto EPCs on a Diverging Road”. In: (Sept. 2022). url: <https://dbrs.morningstar.com/research/402539/european-auto-absauto-epcs-on-a-diverging-road>.
- ECB. “Eurosystem Collateral Data.” ECB, 28 October 2024, <https://www.ecb.europa.eu/mopo/coll/charts/html/index.en.html>.
- Loris André et al. Climate Risk Measurement of Assets Eligible as Collateral for Refinancing Operations – Focus on Asset Backed Securities (ABS). url: <https://publications.banque-france.fr/en/climate-risk-measurement-assets-eligible-collateralrefinancing-operations-focus-asset-backed>.

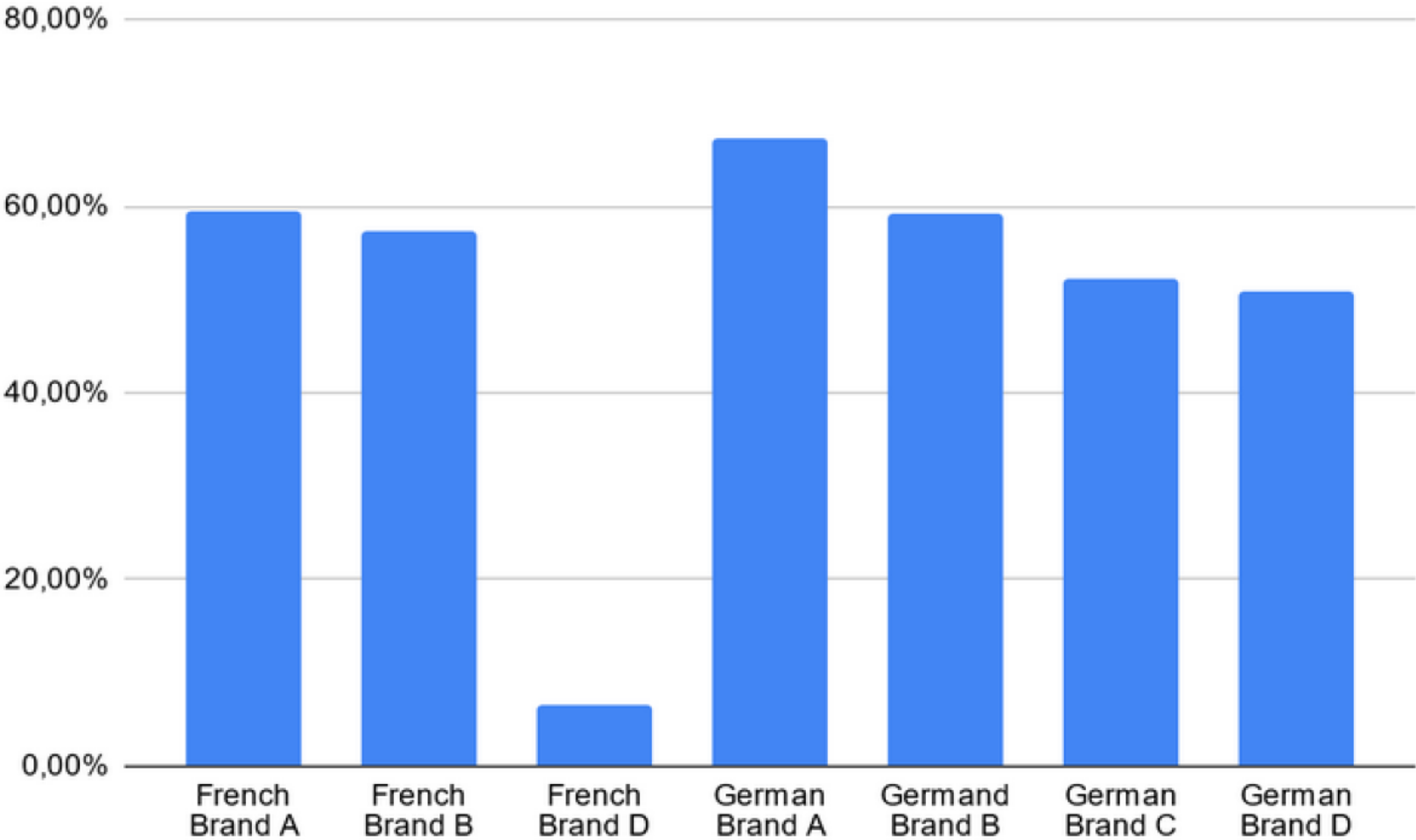
French coverage rates (value for EPCs: 28.1%)



German coverage rates (value for EPCs: 44%)



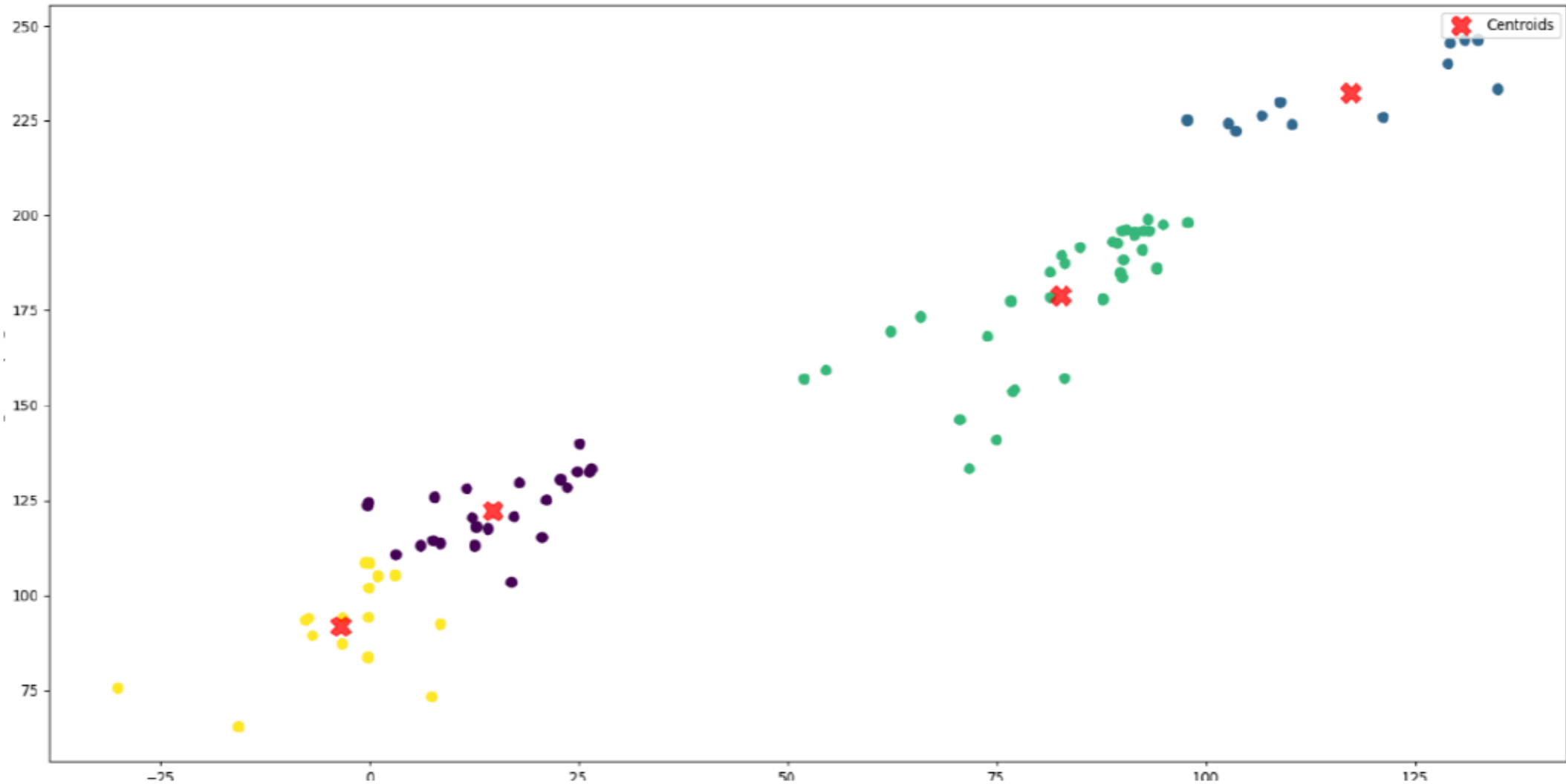
Coverage rates of EPCs for the biggest brands in France and Germany



Reference emissions by category of vehicles

	0-20 000€	20 000-40 000€	40 000-60 000€	60 000-80 000€	80 000€ ou +
2010	150.11	147.01	161.12	150.50	150.50
2011	145.53	157.38	161.23	160.72	158.17
2012	137.61	145.97	161.39	158.17	150.50
2013	131.95	139.29	169.20	161.23	158.17
2014	120.51	109.80	144.39	187.74	186.57
2015	113.48	105.98	127.30	167.91	206.45
2016	112.79	106.18	120.19	146.11	189.64
2017	115.31	110.34	123.25	135.21	176.74
2018	123.85	120.15	130.04	144.21	171.90
2019	128.99	121.75	126.39	131.35	141.27
2020	115.68	114.57	117.06	119.77	131.75
2021	114.44	112.12	109.12	113.00	129.78
2022	121.88	113.70	108.75	119.04	121.55
2023	118.84	108.97	102.74	113.57	113.79
2024	109.41	81.82	100.88	150.50	150.50

K-means clustering with 4 clusters. GEA on the x-axis, NTE-I on the y-axis



GREEN AUTO SECURITISATION RESEARCH PROJECT (GAS)

MARINE MAÎTRE & LUDOVIC THEBAULT, EUROPEAN DATAWAREHOUSE

GREEN AUTO SECURITISATION (GAS) PROJECT

AIMING TO FACILITATE THE FINANCING OF LOW-EMISSION VEHICLES.

EDW collaborates with the Leibniz Institute for Financial Research SAFE on the Green Auto Securitisation (GAS) project.

- The project was **awarded a grant** by the German Federal Ministry for Education and Research under the Climate Protection and **Finance (KlimFi) funding initiative**.
- **GAS seeks to promote the use of auto ABS and leasing ABS markets** by designing a framework for a mechanism that supports the financing of low-emission vehicles (LEVs).



**EUROPEAN
DATAWAREHOUSE**

SPONSORED BY THE

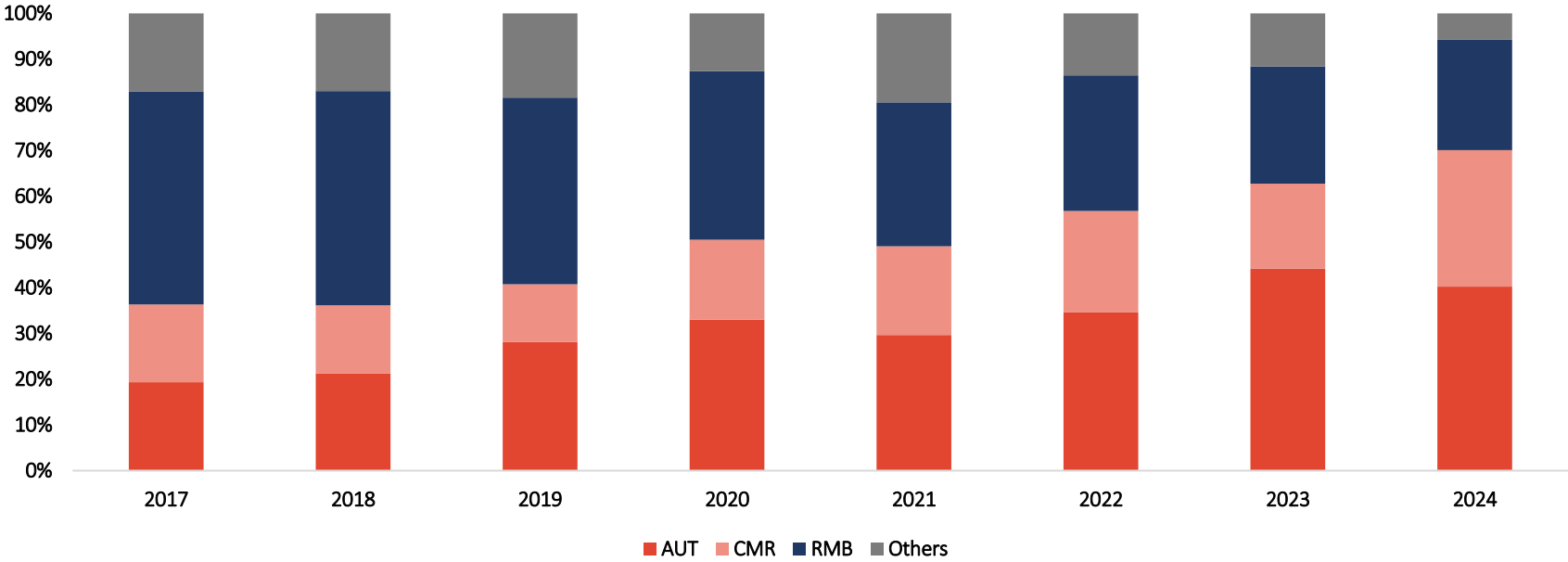


Federal Ministry
of Education
and Research

PUBLIC DEALS ISSUED OVER THE YEARS BY ASSET CLASS

AUTO ABS IS NOW THE LARGEST ASSET CLASS – FOLLOWED BY CONSUMER AND THEN RMBS


Breakdown of Public ABS deals by Asset Class over the years




Source: EDW calculations

EUROPEAN ENVIRONMENT AGENCY (EEA) DATA

DATA FOR ALL NEW CARS REGISTERED IN EU27 SINCE 2010

European Environment Agency 

Topics Countries Data and maps Indicators Publications Media About us EN Search 

Datasets

CO₂ emissions from new passenger cars

CO₂ emissions from new passenger cars registered in EU27, Iceland (from 2018) and Norway (from 2019) - Regulation (EU) 2019/631.

Data table explorer [Dashboard](#)

Search term

Current filters applied: 2 [Reset filters](#)

ID	Country	Vehicle family identification nu...	Pool	Manufacturer name (EU st...	Manufacturer name (OEM ...	Manufacturer name (MS r...	Type approval number	Type	Variant	Version	Make	Commercial name	Category of the ...	Category of the ...	Total new registrations	Mass in running orde...	WLTP test...	Specific CO ₂ E...	Specific CO ₂ E...	Wheel base...	Axle width...	Axle width...	Fuel type	Fuel mode	Engine capacity...	Engine power...	Electric energy consumption...	Electric range...	Innovative technology...	Emissions reduction...	
129006993	IT			TESLA	TESLA INC		e4*2007/46*1293*28	3	E5LD	BQ8155N	TESLA	MODEL 3	M1	M1	1	1926			0				electric	E		153					
129006994	IT	IP-03_MP_0327-ZFA-1	STELLANTIS	CHRYSLER	PCA US LLC		e3*2007/46*0300*39	BU	AXU1B	E21P5	JEEP	RENEGADE	M1	M1	1	1505	1611	135					diesel	M	1598	96		e3 29			
129006995	IT	IP-07A1MKPIE3A_001-VF1-1	RENAULT-NISSAN-MITSUBISHI	RENAULT	RENAULT SAS		e2*2007/46*0457*26	AH	2BE2	MKSUA2L12000	RENAULT	TWINGO	M1	M1	1	993	1077	117					petrol	M	999	48		e2 29			
129006996	IT	IP-0153-JT1-1	SUBARU-SUZUKI-TOYOTA	TOYOTA MOTOR CORPORATION	TOYOTA MOTOR CORPORATION		e6*2018/858*00013*03	XPB1FLM	MX9J10H	MX9J10L-BHKNBW90	TOYOTA	TOYOTA YARIS CROSS	M1	M1	1	1250	1340	101					petrol	H	1490	68					
129006997	IT	IP-050531-NLH-1	HYUNDAI MOTOR EUROPE	HYUNDAI ASSAN	HYUNDAI ASSAN OTOMOTIV SANAYI VE TICARET AS		e5*2007/46*0090*08	AC3	B5P11	M53A11	HYUNDAI	I10	M1	M1	1	996	1128	116					petrol	M	998	49					
129006998	IT	IP-0931273-KNA-1	KIA	KIA	KIA CORPORATION		e9*2018/858*11241*00	SG2	C5P11	D61A1Y1	KIA	NIRO	M1	M1	1	1474	1604	105					petrol	H	1580	77					
129006999	IT	IP-0110-JT1-1	SUBARU-SUZUKI-TOYOTA	TOYOTA	TOYOTA MOTOR EUROPE NV SA		e6*2007/46*0437*04	XP11REUM	MX9H11H	MX9H11L-BHKNBW2E	TOYOTA	TOYOTA YARIS	M1	M1	1	1160	1282	92					petrol	H	1490	68		e6 37			
129007000	IT	IP-F16A1RN6DAV_01-JN1-1	RENAULT-NISSAN-MITSUBISHI	NISSAN AUTOMOTIVE EUROPE	NISSAN AUTOMOTIVE EUROPE SAS		e9*2007/46*0669*10	F16	A	A18	NISSAN	NISSAN JUKE	M1	M1	1	1262	1352	133					petrol	M	999	84		e2 29 37			
129007001	IT	IP-YH2_ATN8214D-VR3-0	STELLANTIS	STELLANTIS AUTO	STELLANTIS AUTO SAS		e2*2007/46*0628*26	F	C	VH2T-Q21700	PEUGEOT	308	M1	M1	1	1475	1577	131					diesel	M	1499	96		e2 29 37			
129007002	IT	IP-03_312_0344-ZFA-1	STELLANTIS	STELLANTIS EUROPE	STELLANTIS EUROPE SPA		e3*2007/46*0064*69	312	YD1B	ASA	LANCIA	YPSILON	M1	M1	1	1085	1170	111					petrol	H	999	52		e3 33			

Download search results (CSV) Results 1 - 10 of 10734654 [reset >>](#)

Filter by

Status Final Provisional

Registration year 2023 2022 2021 2020 2019 2018 2017 2016 2015 2014 2013 2012 2011 2010

Country

Pool

Manufacturer name

Commercial name

Mass in running order (kg)

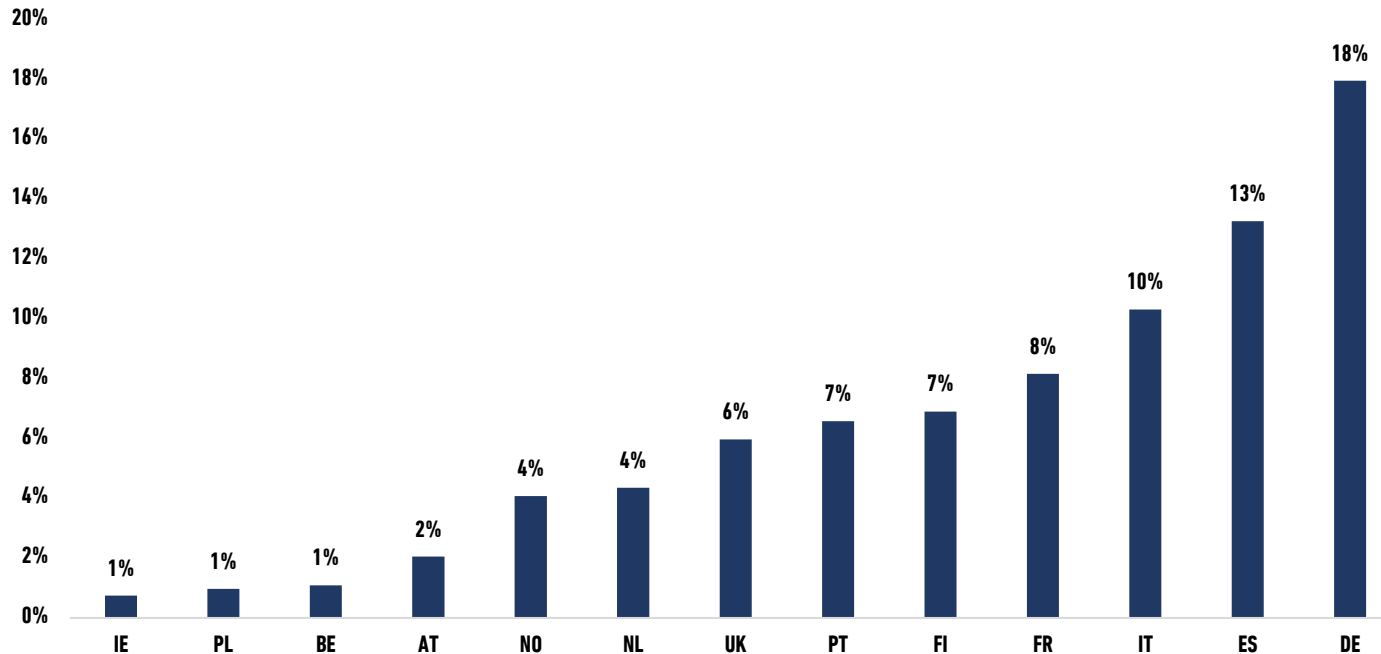
Specific CO₂ Emissions in g/km (WLTP)

Note: The column 'Count' in the filters reports the sum of the rows and not the sum of the new car's registrations.

PERCENTAGE OF NEW CAR REGISTRATIONS SECURITISED IN PUBLIC ABS DEALS

A SIGNIFICANT PORTION OF NEW CARS FROM GERMANY, SPAIN, ITALY AND FRANCE SHOW UP IN PUBLIC AUTO ABS

Percentage of New Car Registrations Securitized in Public ABS Deals



Source: EDW calculations

*using car loan/leases for New cars with a year of registration of 2010 or later

*UK data only till 2020

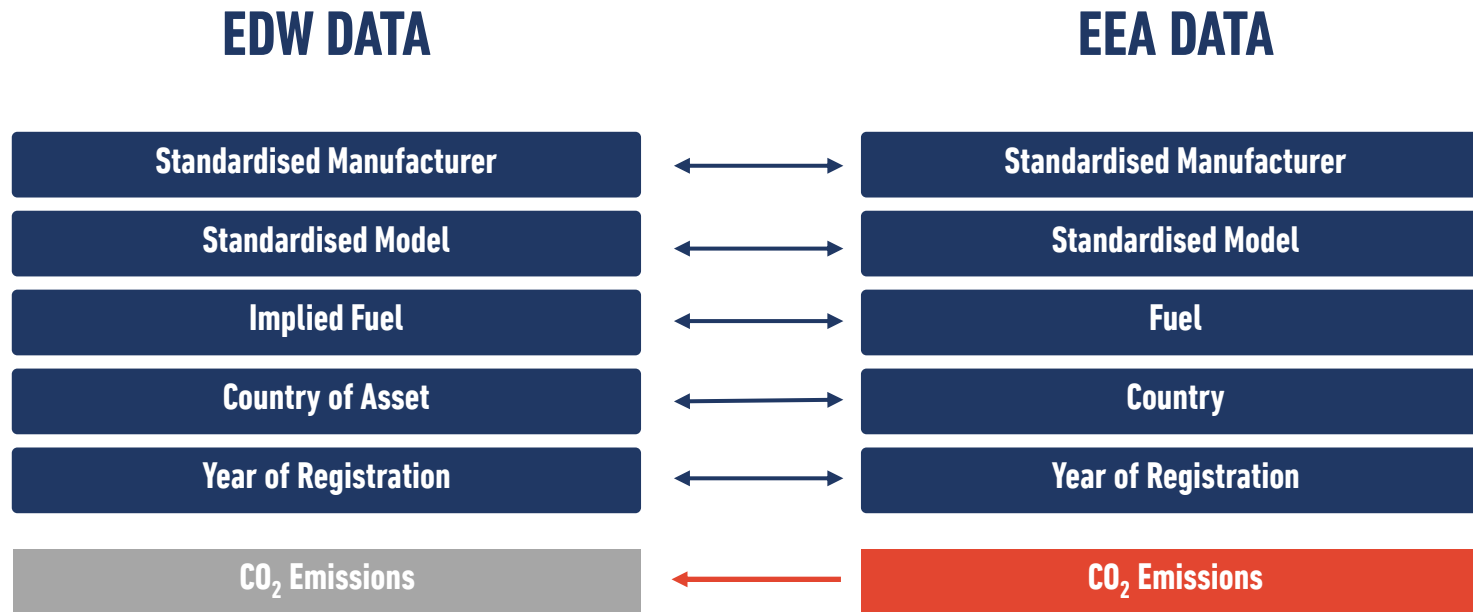
ESMA DISCLOSURE REQUIREMENTS

ENERGY PERFORMANCE CERTIFICATE IS A MANDATORY FIELD BUT ONLY REPORTED IN 24% OF CASES

FIELD CODE	FIELD NAME	CONTENT TO REPORT
Underlying exposures information section		
AUTL53	Manufacturer	Brand name of the vehicle manufacturer E.g. enter "Skoda", not "Volkswagen".
AUTL54	Model	Name of the car model.
AUTL55	Year Of Registration	Year the car was registered.
AUTL56	New Or Used	Condition of vehicle at point of underlying exposure origination: New (NEWX) Used (USED) Demo (DEMO) Other (OTHR)
AUTL57	Energy Performance Certificate Value	The energy performance certificate value of the collateral at the time of origination: A (EPCA) B (EPCB) C (EPCC) D (EPCD) E (EPCE) F (EPCF) G (EPCG) Other (OTHR)

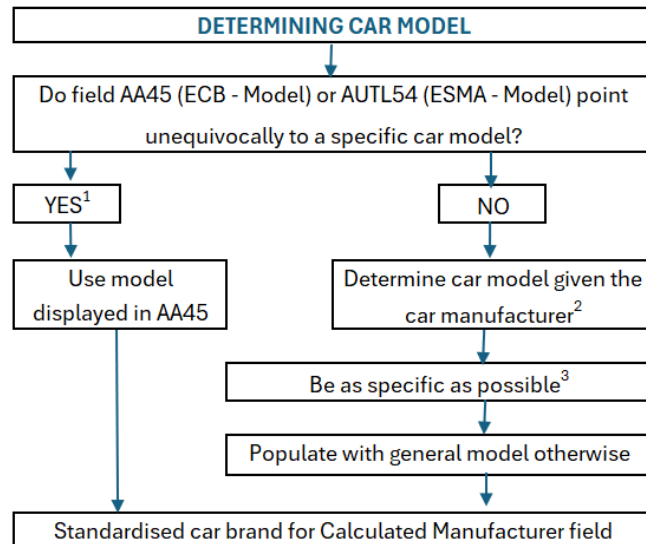
ESTIMATING CO₂ EMISSIONS FOR CAR LOANS/LEASES IN EDW DATA

MATCHING EDW DATA WITH EUROPEAN ENVIRONMENT AGENCY (EEA) DATA, 87% OF LOANS/LEASES SUCCESSFULLY MATCHED WITH A CO₂ EMISSIONS ESTIMATE – INCL. ECB DATA



DETERMINING CAR MODEL AND FUEL TYPE IN EDW DATA

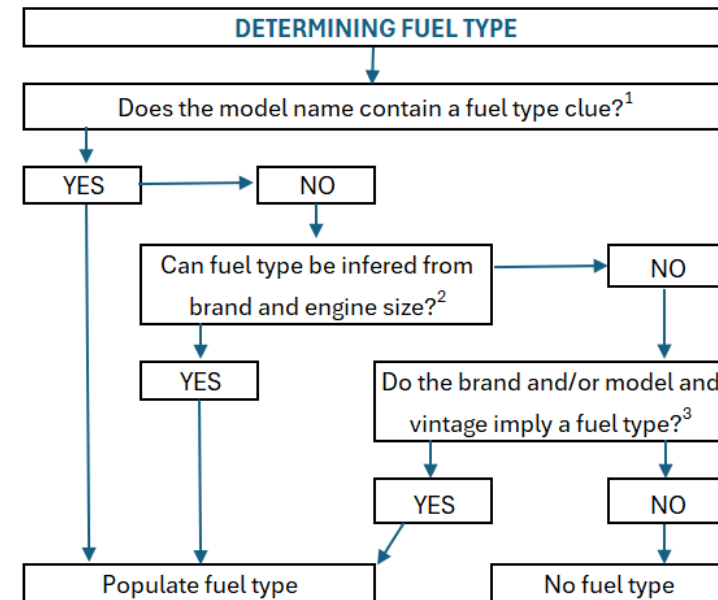
REFINING EDW DATA AS MUCH AS POSSIBLE TO STANDARDISE KEY FIELDS AND CREATE NEW FIELDS



1) Some model names are very specific and unequivocal (Clio, Laguna, Twingo = Renault)

2) If AA45 contains "3", if it is a BMW we assume it is a 3 Series;
if a Mazda we assume it is a Mazda 3

3) If a BMW and if model reported as 3 then "3 Series";
if the model is reported as 318i then 318i



1) Strings like TSI and TFSI imply petrol, TDI implies diesel etc.

2) For instance, a 1968cc engine in a VW is a diesel

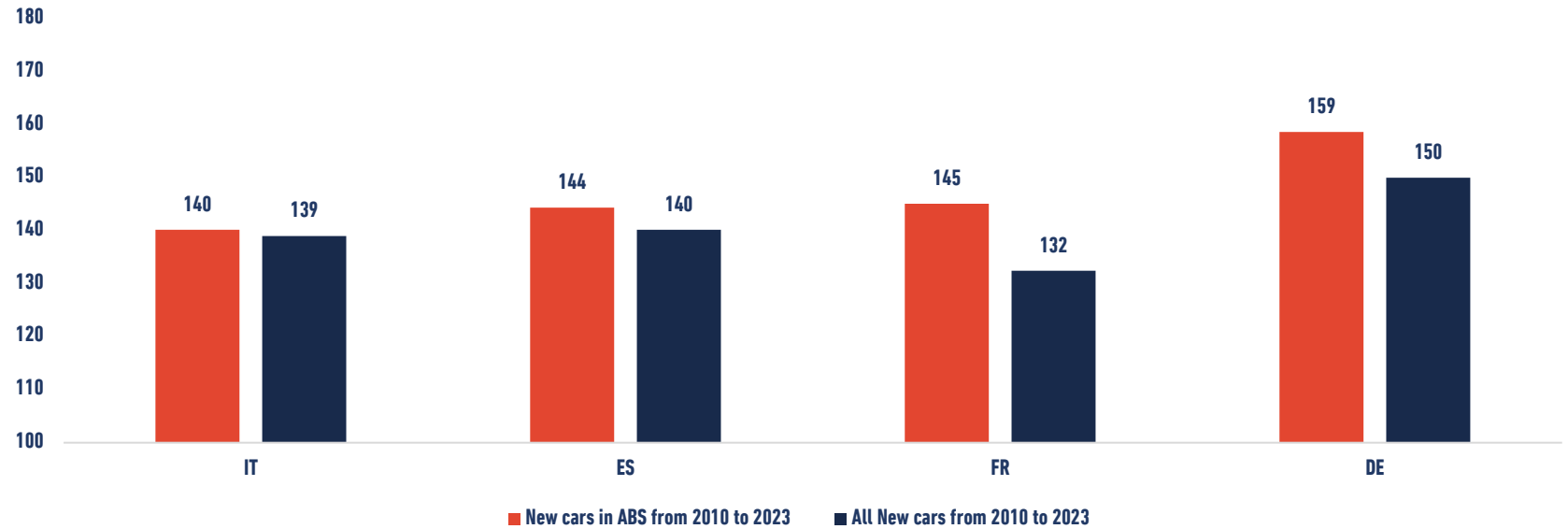
3) If it is a Ferrari, it has a petrol engine...

COMPARISON OF AVERAGE CO₂ EMISSIONS: ALL NEW CARS VS. NEW CARS IN ABS PORTFOLIOS

EMISSIONS OF NEW CARS IN ABS POOLS ARE A LITTLE HIGHER THAN THE AVERAGE OF NEW CARS FOR THE COUNTRY

- New cars in German and French ABS pools have above average CO₂ emissions

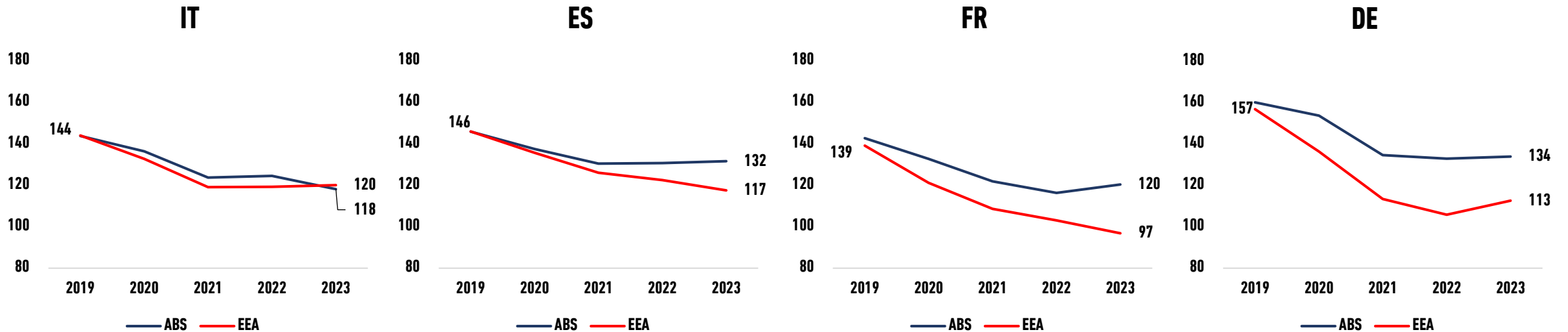
Avg Emissions of new cars registered since 2010 vs new cars in ABS portfolios



Source: EDW calculations and EEA data
* Only New cars registered in 2010 or later were used in the calculations

COMPARISON OF AVERAGE CO₂ EMISSIONS: ALL NEW CARS VS. NEW CARS IN ABS PORTFOLIOS - LAST 5 YEARS

EMISSIONS OF NEW CARS IN ABS POOLS ARE A LITTLE HIGHER THAN THE AVERAGE FOR THE COUNTRY, NEW CARS IN GERMANY AND FRANCE ALSO HAVE A MORE DRASTIC DROP IN AVG EMISSIONS IN THE LAST 5 YEARS



Source: EDW calculations and EEA data
* Only New cars were used in the calculations

AMBITIOUS NEW CO₂ LABELING ORDINANCE FOR CARS IN GERMANY

MANDATORY SINCE 1ST MAY 2024

Major changes:

1. Car weight ❌

Absolute Thresholds on CO₂ emissions! ✔️

2. NEDC ❌

WLTP cycle ✔️

4. Die §§ 3a und 4 werden wie folgt gefasst:

„§ 3a

Zuweisung zu einer CO₂-Klasse

(1) Der Hersteller muss neue Personenkraftwagen entsprechend der Höhe der kombinierten CO₂-Emissionen einer der nachfolgend bestimmten CO₂-Klassen zuweisen:

CO ₂ -Klasse	Wert der kombinierten CO ₂ -Emissionen (in Gramm CO ₂ je Kilometer)
A	0
B	1 bis 95
C	96 bis 115
D	116 bis 135
E	136 bis 155
F	156 bis 175
G	176 und mehr

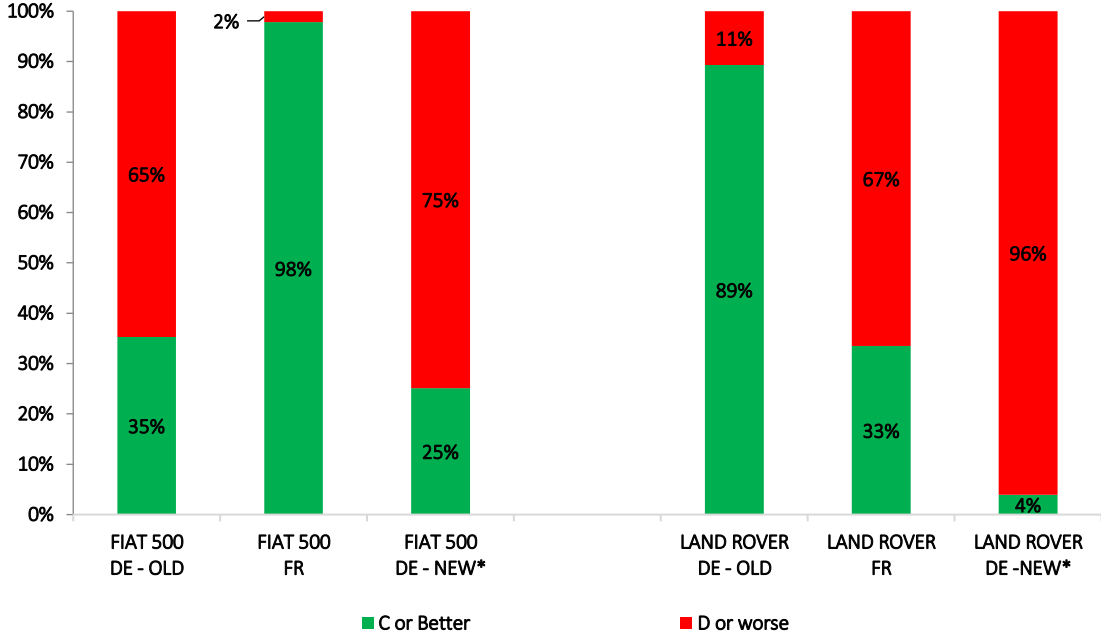
Für extern aufladbare Hybridelektrofahrzeuge ist die CO₂-Klasse jeweils auf der Grundlage des Werts der gewichtet kombinierten CO₂-Emissionen und auf der Grundlage des Werts der kombinierten CO₂-Emissionen anzugeben; letztere Angabe ist zu benennen als „bei entladener Batterie“.

(2) Maßgeblich für die Zuweisung eines individuellen Personenkraftwagens zu einer CO₂-Klasse ist der Wert der CO₂-Emissionen, der sich aus der Übereinstimmungsbescheinigung dieses Personenkraftwagens ergibt.

*NEDC (New European Driving Cycle) was replaced by WLTP (Worldwide Harmonised Light Vehicles Test Procedure) after September 2018

AMBITIOUS NEW CO₂ LABELING ORDINANCE FOR CARS IN GERMANY

ITS IMPACT ON EPCS ASSIGNED TO COMMON CARS

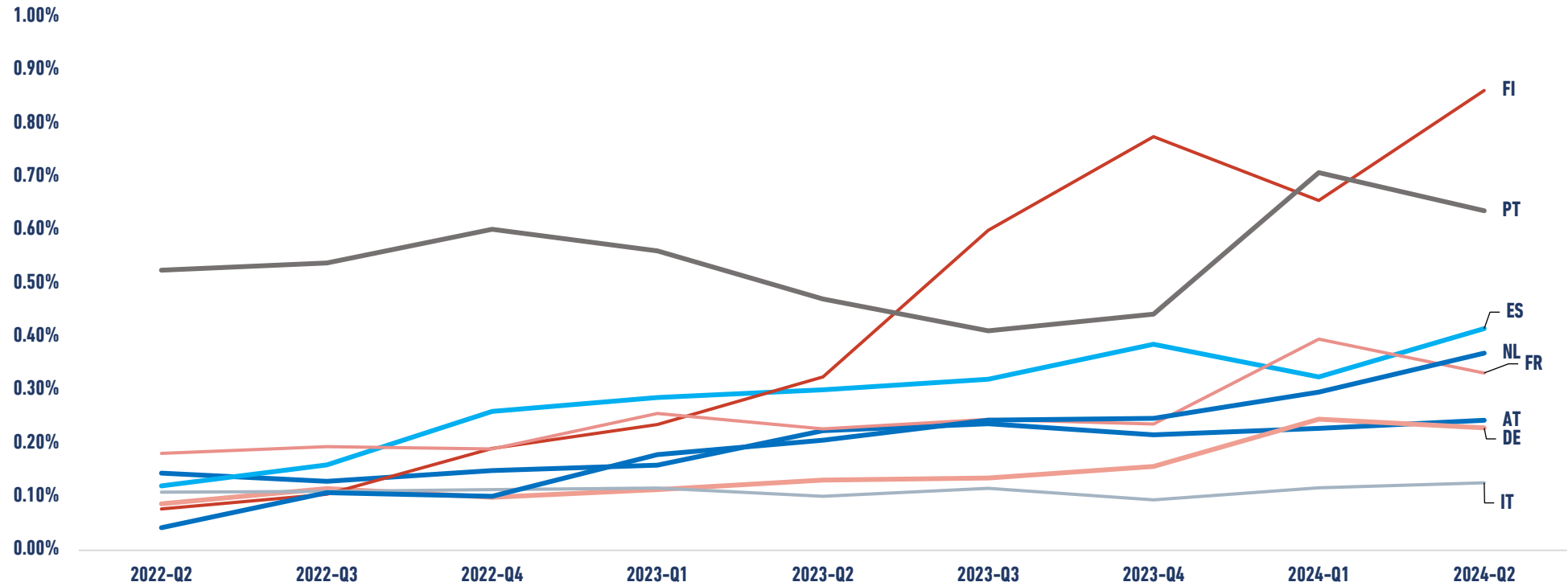


* Based on new thresholds on estimated CO2 emissions

AUTO ABS - DELINQUENCIES BY COUNTRY

PORTUGAL, SPAIN AND FINLAND WITH SLIGHTLY HIGHER DELINQUENCIES

60 - 90 Days Delinquencies (% of Current Balance)

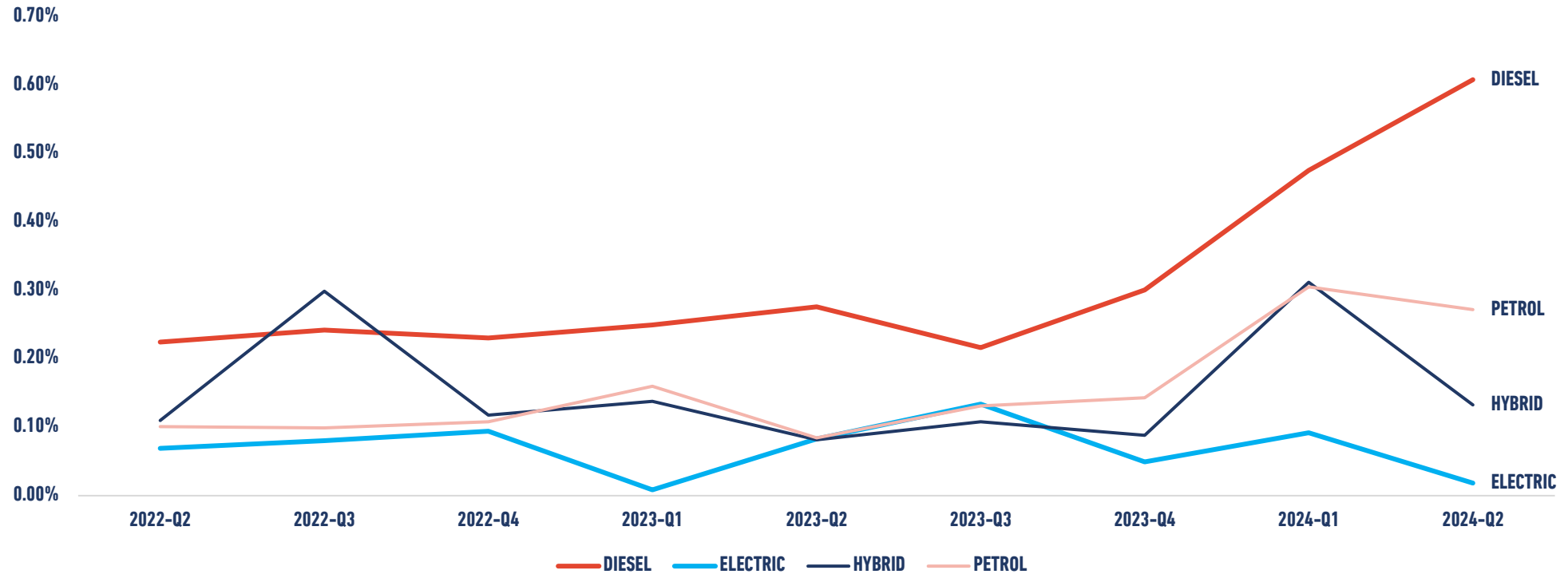


* Only those deals were included that reported in every quarter since 2022-Q1 till 2024-Q2

FRENCH AUTO ABS - DELINQUENCIES BY FUEL

ELECTRIC CAR LOANS/LEASES HAVE THE BEST PERFORMANCE

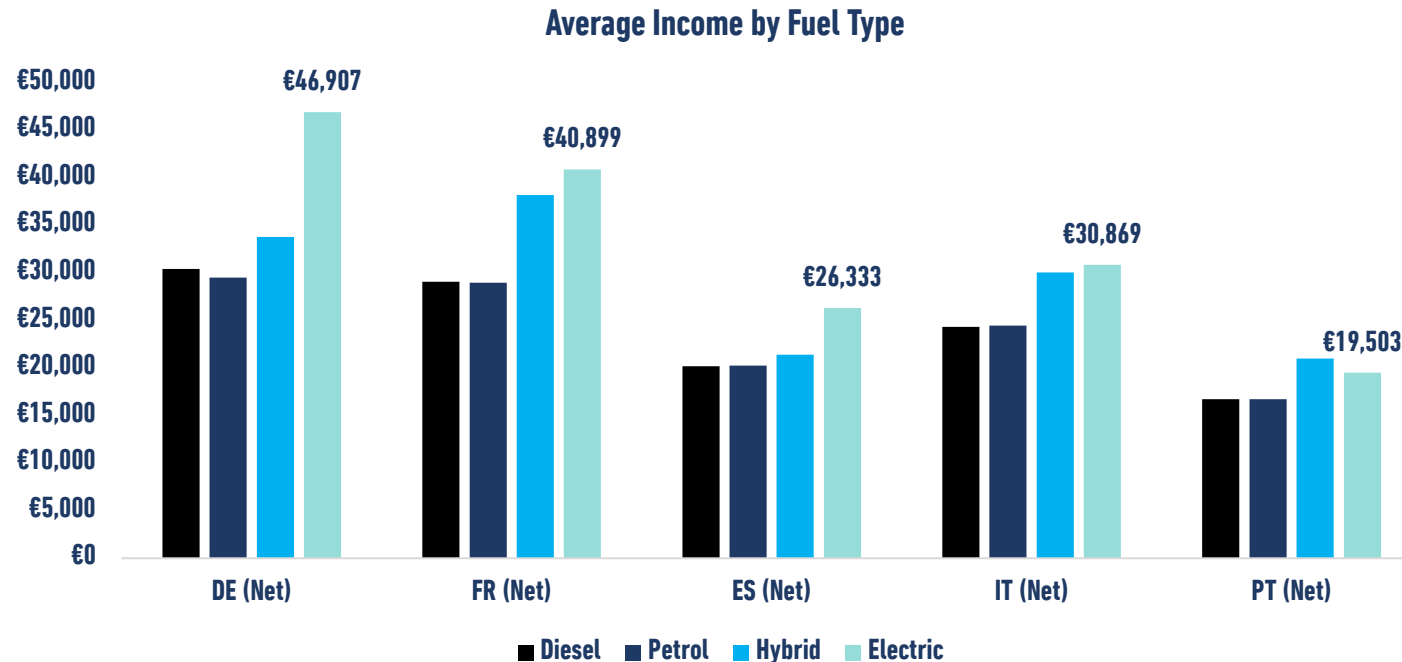
60 - 90 Days Delinquencies (% of Current Balance)



* Only those deals were included that reported in every quarter since 2022-Q1 till 2024-Q2

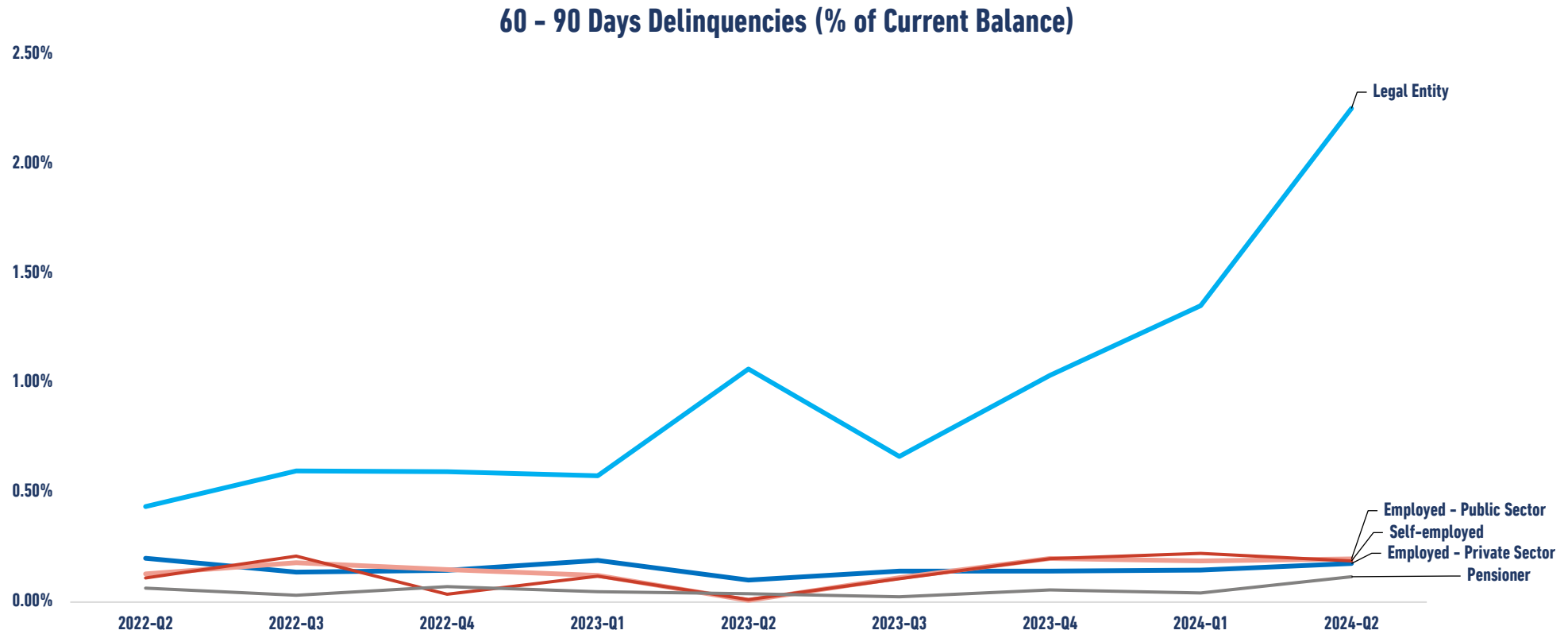
EU AUTO ABS – AVERAGE NET INCOME OF EMPLOYED BORROWERS BY FUEL TYPE

EMPLOYED BORROWERS THAT FINANCE ELECTRIC CARS HAVE THE HIGHEST INCOMES



GERMAN AUTO ABS – DIESEL ONLY – DELINQUENCIES BY EMPLOYMENT

SMALL BUSINESSES DRIVING DELINQUENCIES FOR DIESEL CAR LOANS/LEASES



* Only those deals were included that reported in every quarter since 2022-Q1 till 2024-Q2

ENGAGE FOR ESG – EU TAXONOMY ASSESSMENT

MARCO ANGHEBEN, EUROPEAN DATAWAREHOUSE



EU Taxonomy Compliance Solution for Mortgages and Home Renovation Loans



Co-funded by the
European Union





ENGAGE for ESG: a concrete solution

1. PHYSICAL RISKS

“What data is needed for EU Taxonomy Alignment?”

“What is needed to gain insights into the renovation potential?”

2. GREEN ASSET RATIO CALCULATION

“How does this mortgage portfolio compare to other portfolios?”

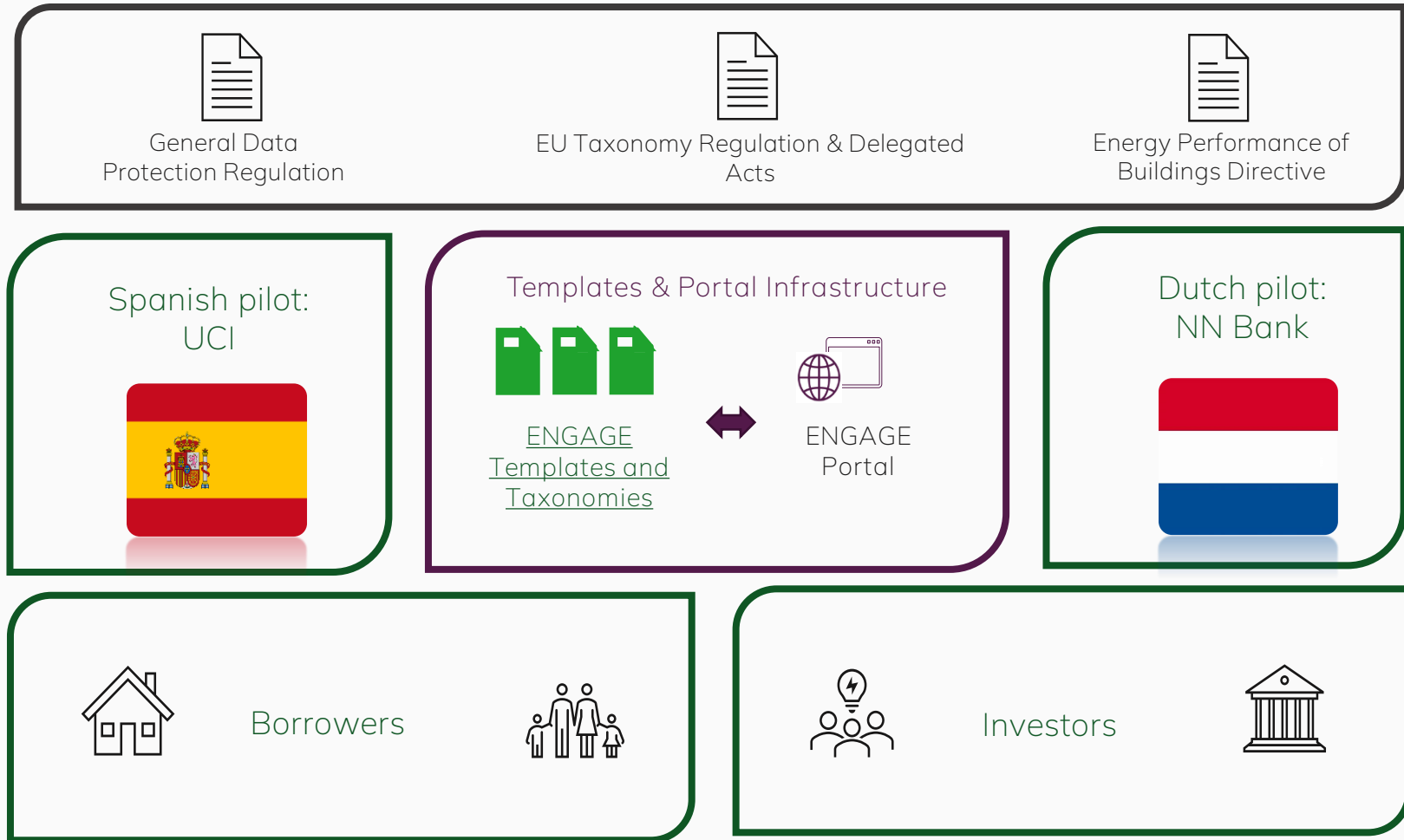
“Which portfolio has the best renovation performance?”

3. TRANSITION RISKS MANAGEMENT

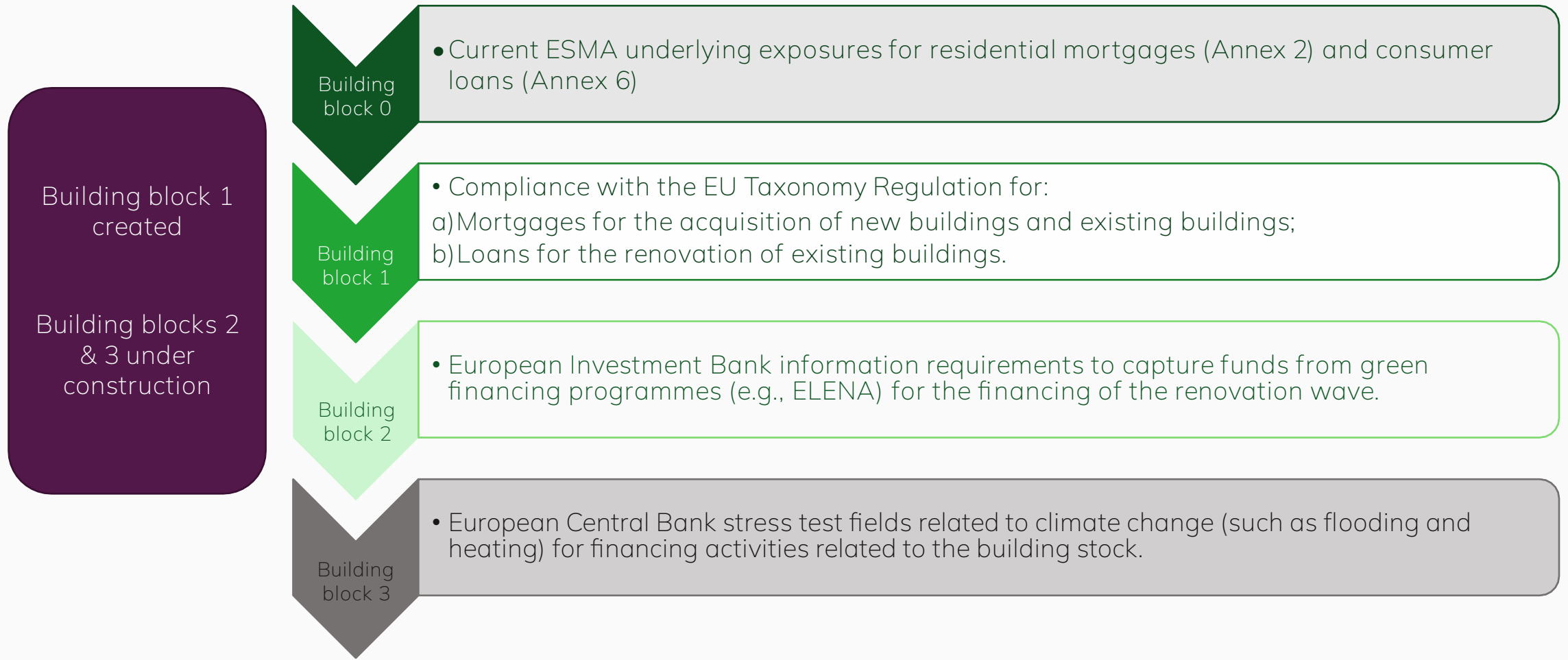
ENGAGE for ESG initiative description

Two main pillars:

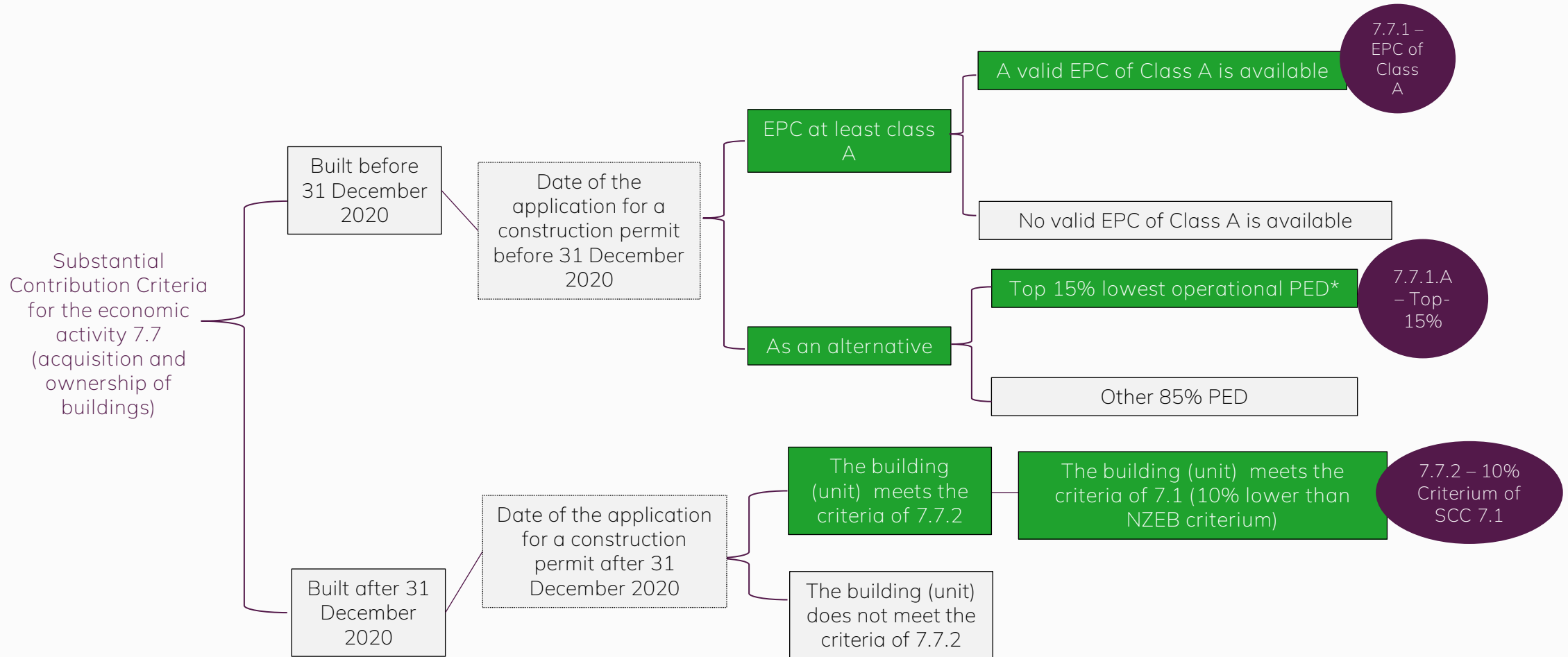
1. A template for real estate data encompassing key EU sustainable finance disclosure requirements;
2. A portal to assess EU Taxonomy alignment.



The ENGAGE Templates: structure



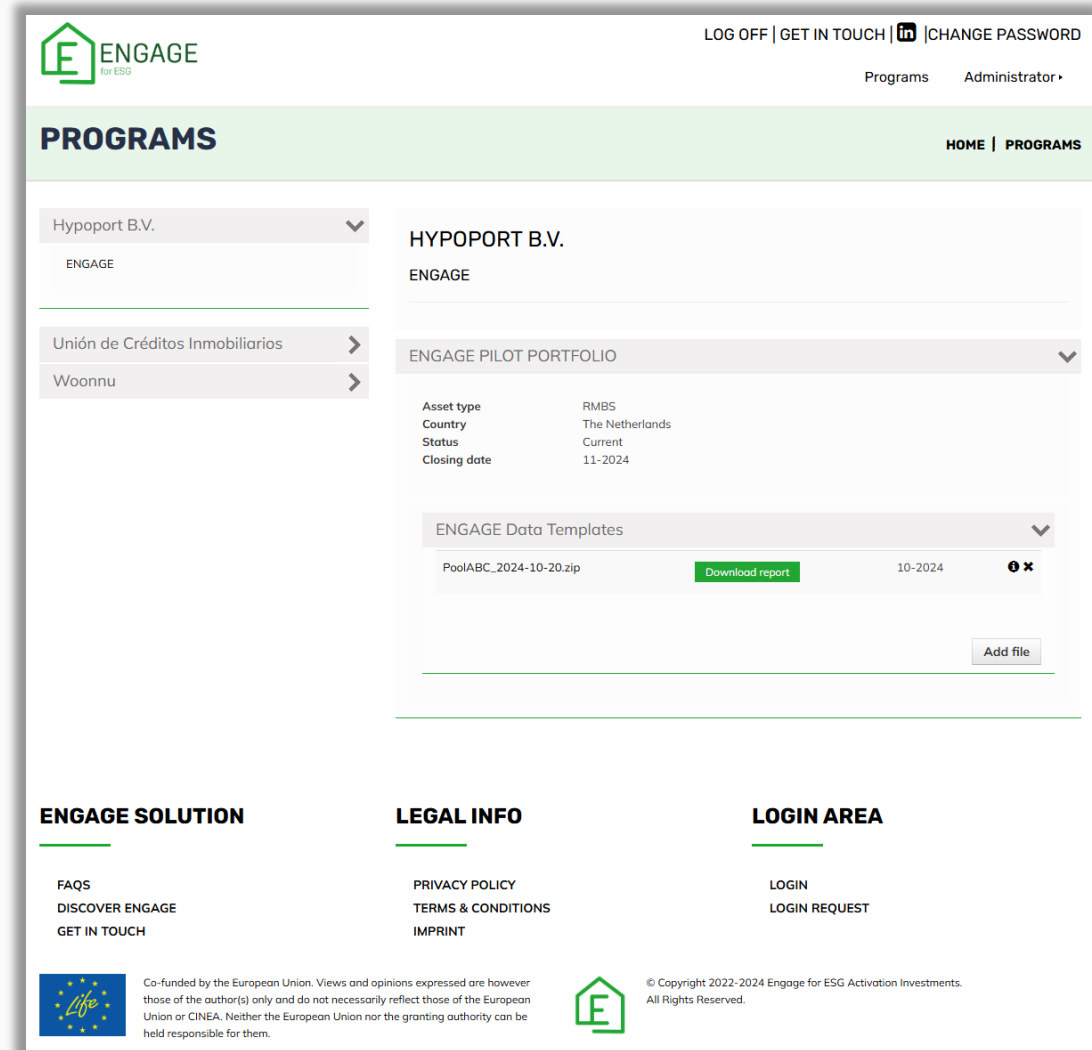
The ENGAGE Templates: summary



The EU Taxonomy is the common denominator of many sustainable finance regulations

The ENGAGE Portal

- The ENGAGE Portal will enable lending institutions to upload and assess the alignment of their loan portfolios with the EU Taxonomy.
- The Portal incorporates detailed loan and collateral level checks.
- Access to multiple stakeholders (internal reporting, rating agencies, investors, regulatory supervisors, etc.) upon invitation.
- The ENGAGE Portal will enable users to assess multiple portfolios based on the EU Taxonomy.
- The Portal output is twofold:
 1. The data quality feedback;
 2. The EU Taxonomy alignment report.
- Trial access available subject to a standard legal arrangement (available upon request).



The screenshot displays the ENGAGE Portal interface. At the top, the ENGAGE logo is on the left, and navigation links for 'LOG OFF', 'GET IN TOUCH', and 'CHANGE PASSWORD' are on the right. Below the logo, there are links for 'Programs' and 'Administrator'. The main header is 'PROGRAMS' with a 'HOME | PROGRAMS' breadcrumb. The content area shows a list of programs: 'Hypoport B.V.' (selected), 'Unión de Créditos Inmobiliarios', and 'Woonnu'. The 'HYPOPORT B.V.' details are shown, including 'ENGAGE PILOT PORTFOLIO' and a table of attributes: Asset type (RMBS), Country (The Netherlands), Status (Current), and Closing date (11-2024). Below this is a section for 'ENGAGE Data Templates' with a table listing a file 'PoolABC_2024-10-20.zip' with a 'Download report' button and a date of '10-2024'. An 'Add file' button is at the bottom right of this section. The footer is divided into three columns: 'ENGAGE SOLUTION' (with links for FAQs, Discover Engage, and Get in touch), 'LEGAL INFO' (with links for Privacy Policy, Terms & Conditions, and Imprint), and 'LOGIN AREA' (with links for Login and Login Request). At the bottom left is the 'Life' logo and a disclaimer about European Union funding. At the bottom right is the ENGAGE logo and copyright information: '© Copyright 2022-2024 Engage for ESG Activation Investments. All Rights Reserved.'



ENGAGE: EU Taxonomy alignment report



Portfolio Name *Example Portfolio 2024*
Portfolio Date (DD-MM-YY) *01-08-2024*

Total # of Loans 1300
Total # of Building Units 1100
Total Balance €444,600,000.00
TSC passed % **0.00%**

TSC assessment*

TSC pass Total Portfolio

Section	Economic Activity	Subsection	SCC (check passed)			DNSH* (check) passed			TSC Passed (SCC + DNSH)			SCC (check passed)			DNSH (check) passed			TSC Passed (SCC + DNSH)			
			# of loans	# of Building Units	Balance	# of loans	# of Building Units	Balance	# of loans	# of Building Units	Balance	% of all loans	% of total Building units	% of total Balance	% of all loans	% of total Building units	% of total Balance	% of all loans	% of total Building units	% of total Balance	
7.1	Construction of new buildings																				
7.2(1)	Renovation of existing buildings	Major Renovations																			
7.2(2)		Reduction of (net) Primary Energy Demand																			
7.3	Installation, maintenance and repair of energy efficiency equipment																				
7.4	Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)																				
7.5	Installation, maintenance and repair of instruments and devices for measuring, regulation and controlling energy performance of buildings																				
7.6	Installation, maintenance and repair of renewable energy technologies																				
7.7(1)	Acquisition and ownership of buildings	<i>Buildings built before 31 December 2020: building has at least an Energy Performance Certificate (EPC) class A.</i>																			
7.7(1a)		<i>Buildings built before 31 December 2020 - Alternative: building is within Top 15%</i>																			
7.7(2)		<i>Buildings built after 31 December 2020</i>																			
Total																					

* If there are multiple checks under this criteria we display the aggregate result of the applicable underlying checks.

** Failed at least one of the underlying check or no data was present to accurately assess the criteria of the relevant economic activity

First overview of the ENGAGE – EU Taxonomy alignment report. Portraying a breakdown of Technical Screening Criteria assessment as per economic (sub) activity

ENGAGE: EU Taxonomy alignment report



Portfolio Name Example Portfolio 2024
Portfolio Date (DD-MM-YY) 01-08-2024
 Total # of Loans 1300
 Total # of Building Units 1100
 Total Balance €444,600,000.00
 TSC passed % **50.94%**

TSC assessment*

TSC pass Total Portfolio

Section	Economic Activity	Subsection	TSC assessment*						TSC pass Total Portfolio											
			SCC (check passed)			DNSH* (check) passed			TSC Passed (SCC + DNSH)			SCC (check passed)			DNSH (check) passed			TSC Passed (SCC + DNSH)		
			# of loans	# of Building Units	Balance	# of loans	# of Building Units	Balance	# of loans	# of Building Units	Balance	% of all loans	% of total Building	% of total Balance	% of total loans	% of total Building	% of total Balance	% of total loans	% of total Building	% of total Balance
7.7(1)	Acquisition and ownership of buildings	Buildings built before 31 December 2020: building has at least an Energy Performance Certificate (EPC) class A.	460	411	€133,400,000.00	414	370	€120,060,000.00	411	363	€119,190,000.00	35.38%	37.36%	30%	31.85%	33.64%	27%	31.62%	33.00%	27%
7.7(1a)		Buildings built before 31 December 2020 - Alternative: building is within Top 15%	392	301	€113,680,000.00	353	271	€102,370,000.00	349	301	€101,210,000.00	30.15%	27.36%	26%	27.15%	24.64%	23%	26.85%	27.36%	23%
7.7(2)		Buildings built after 31 December 2020	23	22	€6,670,000.00	21	20	€6,090,000.00	21	22	€6,090,000.00	1.77%	2.00%	2%	1.62%	1.82%	1%	1.62%	2.00%	1%
Total			875	734	€253,750,000.00	788	661	€228,520,000.00	781	686	€226,490,000.00	67.31%	66.73%	57.07%	60.62%	60.09%	51.40%	60.08%	62.36%	50.94%

Example of breakdown for economic activity 7.1 (acquisition and ownership of buildings)



Benefits of the ENGAGE for ESG solution

The ENGAGE Templates are an add-on to the existing disclosure requirements under the Securitisation Regulation (ESMA Templates).

The ENGAGE Templates expect to be a one-size-fit all solution that minimises the reporting burden of lending institutions.

The ENGAGE Templates can be used for portfolios of loans and different funding structures (e.g., securitisations, covered bonds).

Proportionality: where information is not available, the ENGAGE Templates provide with the possibility to use “no data” options.

The ENGAGE Portal does not require any IT implementation by lending institutions.

The ENGAGE team supports test users through the data extraction process, with data enrichment and data quality checks.

The use of the ENGAGE solution is free of charge until October 2025.



How to become a Test User?

Request
ENGAGE
Templates

- Version 1.1 available now through [Request for Access to the ENGAGE Templates](#)
- More than 60 institutions have requested access to the ENGAGE Templates

ENGAGE
Demonstration

- The ENGAGE Team is available for clarifications on the ENGAGE Templates
- Several sessions have already been set up with interested parties

Submission to
ENGAGE Portal

- Available from January 2025, subject to a standard legal arrangement
- Free of charge until October 2025
- Possibility to submit the ENGAGE sample files various times enriching the information

EU Taxonomy
Compliance
Report

- For each sample file submission a compliance report is generated



Website:

engage4esg.eurodw.eu/

Social Media:

<https://www.linkedin.com/company/engage-for-esg-activation-investments/>



Co-funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or CINEA. Neither the European Union nor the granting authority can be held responsible for them.

Project Coordinator:

Marco Angheben

marco.angheben@eurodw.eu

ENGAGE General Contact:

engage@eurodw.eu

Communications

Carla Scarsella

carla.scarsella@eurodw.eu

PANEL: EU SECURITISATION REGULATION CONSULTATION

FABRICE FAURE-DAUPHIN, A&O SHEARMAN,

FRANÇOIS HAAS, BANQUE DE FRANCE,

NATHALIE ESNAULT, CA-CIB,

TAMAR JOULIA, IACPM

CLOSING REMARKS

LUDOVIC THEBAULT, EUROPEAN DATAWAREHOUSE

The background features a low-angle shot of a building's exterior. A bright red roof is visible in the bottom-left corner. The main part of the building is a dark blue-grey color with a grid-like pattern of lines. The sky above is a clear, light blue. A thin red vertical line is positioned on the left side of the image.

Q&A

THANK YOU

CONTACT US

EUROPEAN DATAWAREHOUSE GMBH

Walther-von-Cronberg-Platz 2
60594 Frankfurt am Main

www.eurodw.eu

+49 (0)69 50986 9017

enquiries@eurodw.eu

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THANK YOU