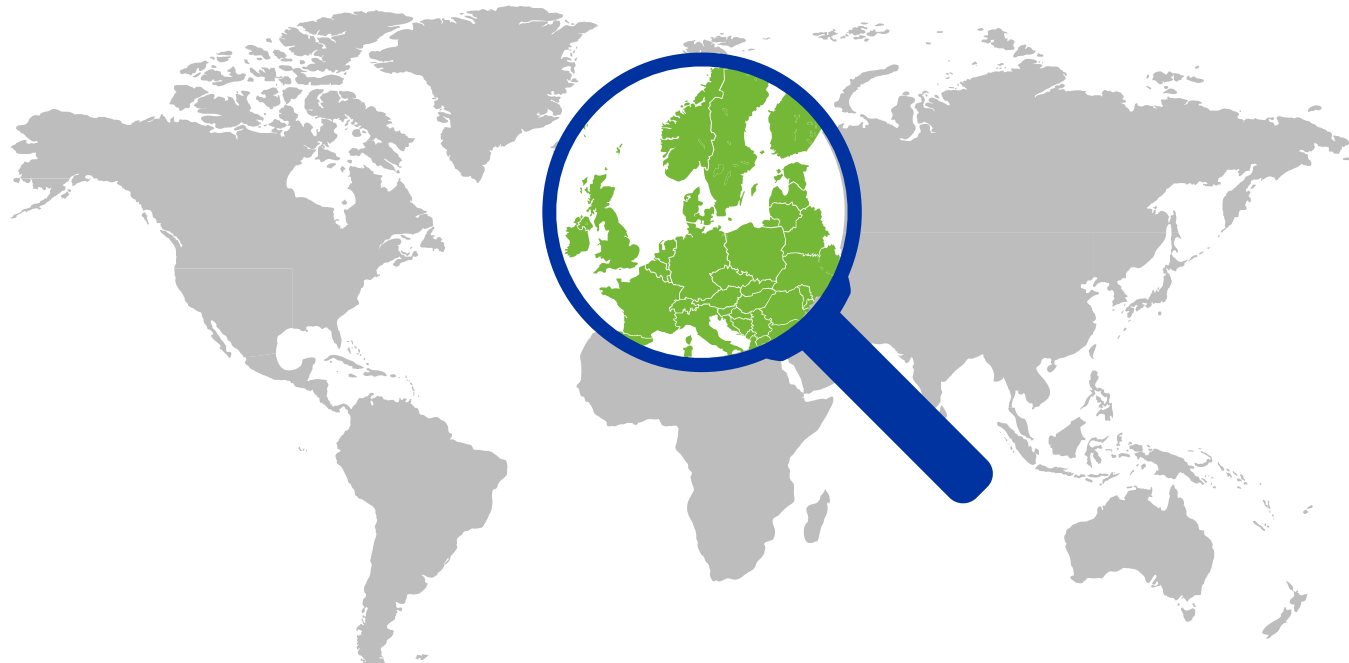


ASSET LEVEL INDEX

Further improving transparency of the non-listed real estate industry



INREV

April 2019

Vitaliy Tonenchuk

Senior Research and Analytics
Manager

Contents

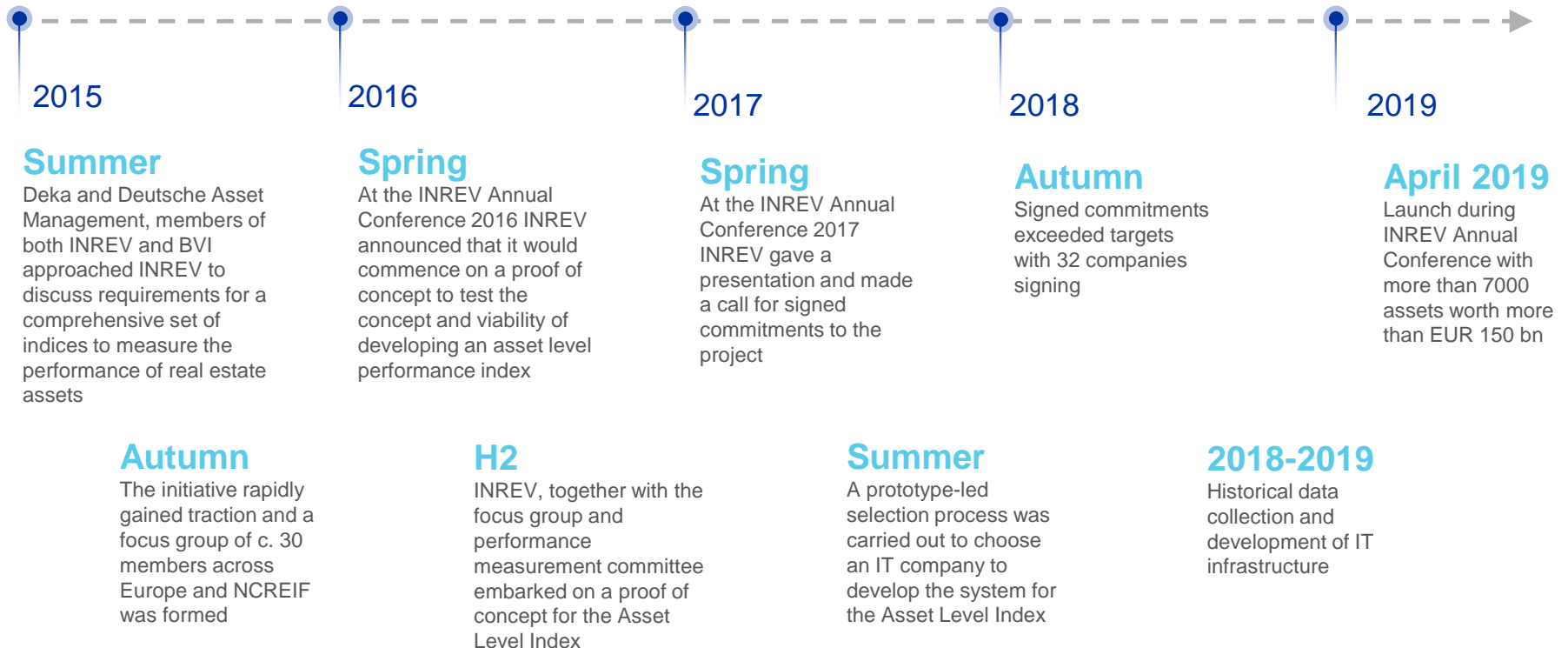
- How it started
- How big the index will be
- How you can use the Asset Level Index
- Where we are now
- What we are asking for
- How to provide data
- How to join

HOW IT STARTED

Request from the membership to improve transparency and accesibility of data



The journey began in 2015...



Why INREV?

Non-profit and member driven initiative

15 years experience with data collection and index production

Collaboration and support from NCREIF and ANREV to expand globally

Adopts the technology for data collection and portfolio and market analysis

Newest data integrity and security technology / measures implemented

32 leading fund managers and investors already support

Members actively worked in focus groups



INREV members and NCREIF contributed their knowledge, expertise and provide governance for the project

Backed by 29 leading global managers and 3 investors

Standard Life Aberdeen

AEW

ALTERA
VASTGOED NV

AMVEST

ASR
vastgoed

AXA Real Estate
An AXA Investment Managers Company

Bouwinvest

CATELLA

CBRE
GLOBAL INVESTORS

ROCKSPRING

Hines

Invesco

syntrus | achmea
real estate & finance

TRIUVA

DWS

NREP

Schroders

I PUT

LaSalle
INVESTMENT MANAGEMENT®

Legal & General
INVESTMENT MANAGEMENT

M&G
INVESTMENTS

vesteda

PATRIZIA

PROLOGIS®



PGIM

BNP PARIBAS
REAL ESTATE

NN

Allianz

PGGM

UBS

SONAE
SIERRA

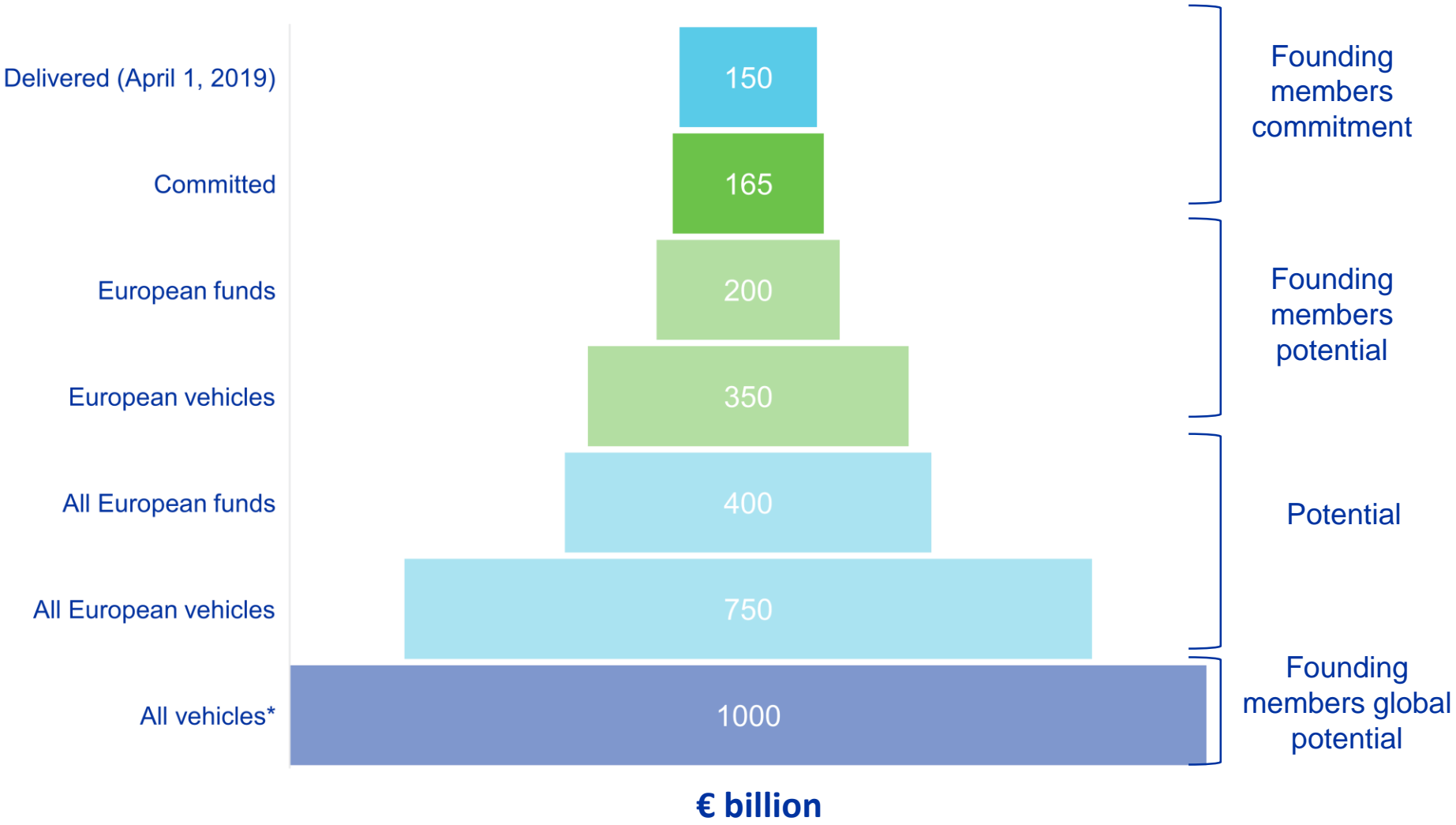
nuveen
A TIAA Company

HOW BIG THE INDEX WILL BE

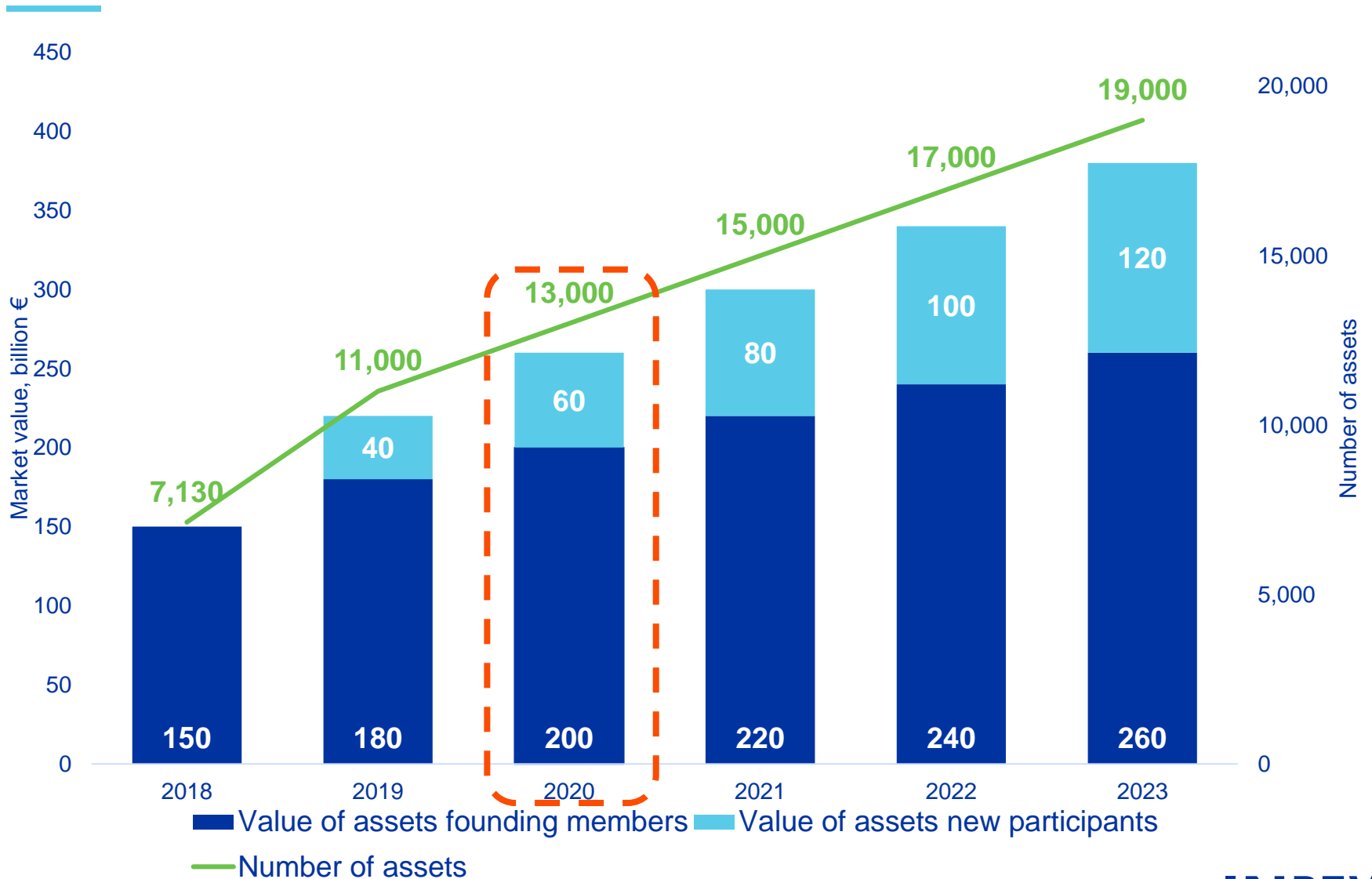
Substantial coverage from day one



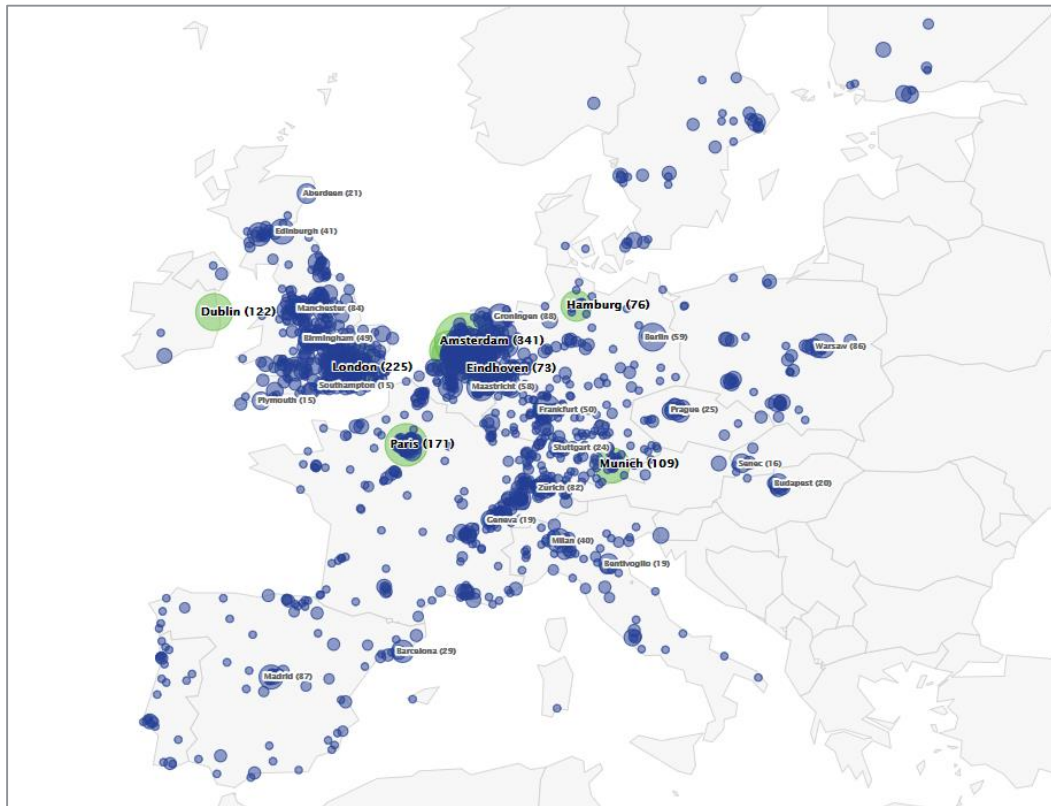
Critical mass committed and collected



Exceed the size of the fund level index by 2020



Launching with pan-European coverage



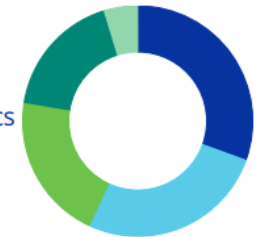
Country Allocation (% of total value)*

- 28.1% United Kingdom
- 22.3% Netherlands
- 14.9% Germany
- 11.7% France
- 23.1% Other



Sector Allocation (% of total value)*

- 30.5% Office
- 26.4% Retail
- 20.6% Industrial / logistics
- 17.7% Residential
- 4.7% Other



* As of the latest period

HOW YOU CAN USE THE ASSET LEVEL INDEX

Asset performance and market comparison



Main goals

Asset Level Index

Comprehensive measures of performance of real estate assets across Europe

Create your own
customised indices with
the online analysis tool
and compare

Formulate strategy and
compare it to a market
index

Get deeper insights into
drivers of your vehicle
performance

Improve industry transparency and data accessibility

Data-driven investment decisions

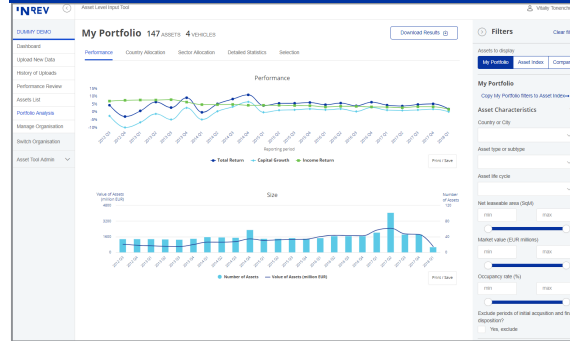


What you get

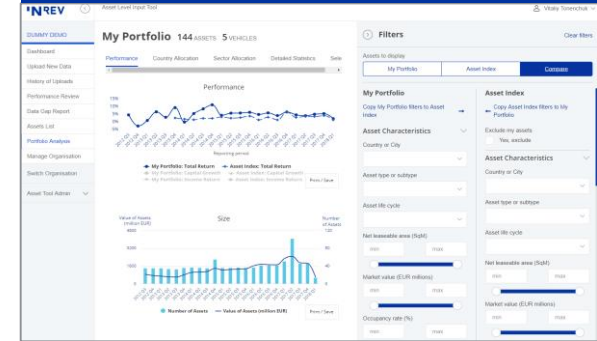
Market analysis tool



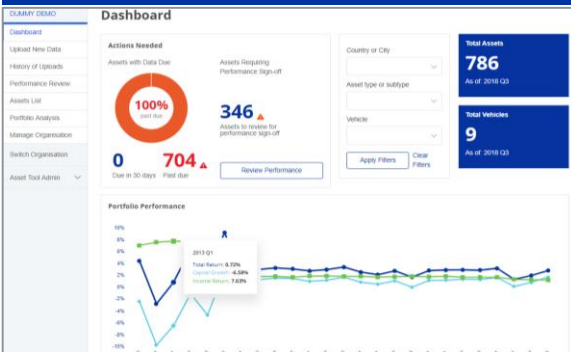
Portfolio analysis tool



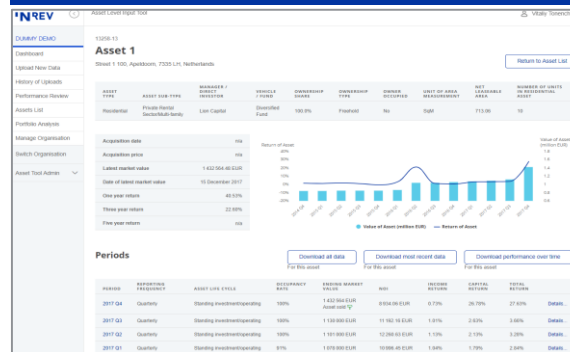
Portfolio vs Market comparison tool



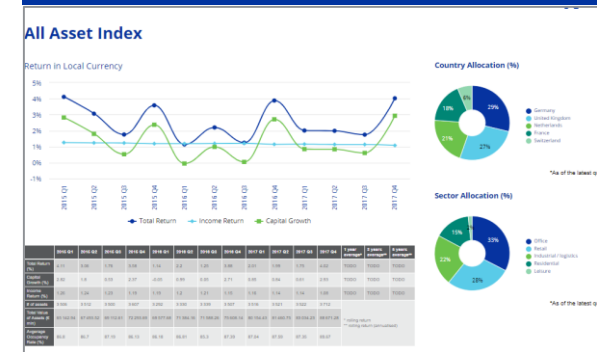
Data Input tool



Asset level performance

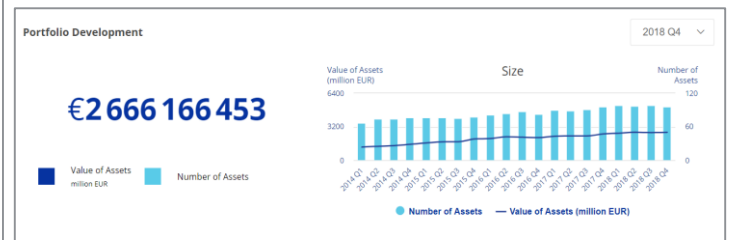
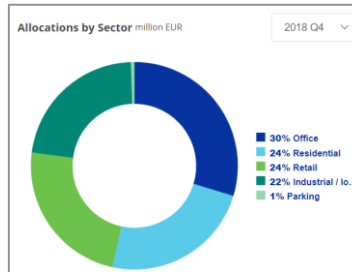
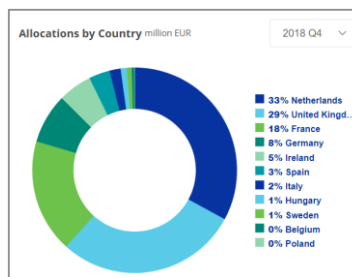
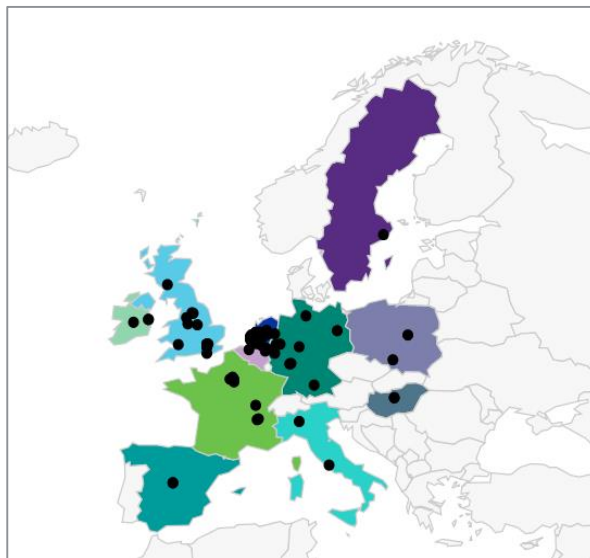


Quarterly report

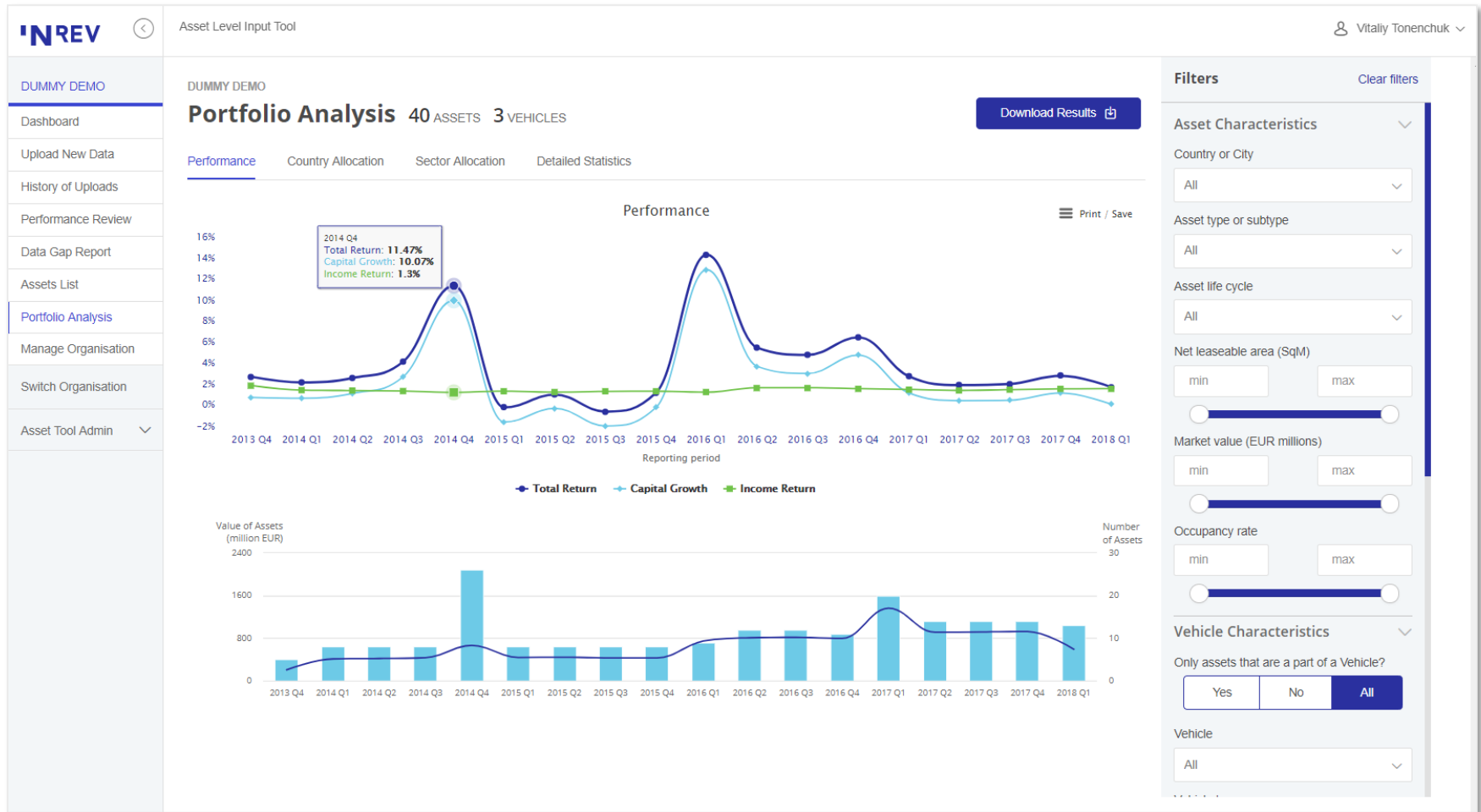


Note: data is not yet approved by INREV

Portfolio and asset level analysis



Portfolio analysis and market comparison



Asset level performance reporting

INREV
Asset Level Input Tool
Vitaliy Tonenchuk

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Asset Tool Admin

13258-13

Asset 1

Street 1 100, Apeldoorn, 7335 LH, Netherlands

[Return to Asset List](#)

ASSET TYPE	ASSET SUB-TYPE	MANAGER / DIRECT INVESTOR	VEHICLE / FUND	OWNERSHIP SHARE	OWNERSHIP TYPE	OWNER OCCUPIED	UNIT OF AREA MEASUREMENT	NET LEASEABLE AREA	NUMBER OF UNITS IN RESIDENTIAL ASSET
Residential	Private Rental Sector/Multi-family	Lion Capital	Diversified Fund	100.0%	Freehold	No	SqM	713.06	10

Acquisition date	n/a
Acquisition price	n/a
Latest market value	1 432 564.48 EUR
Date of latest market value	15 December 2017
One year return	40.53%
Three year return	22.60%
Five year return	n/a

The chart displays the performance of the asset from 2014 Q4 to 2017 Q4. The left Y-axis represents the Return of Asset (ranging from -20% to 40%), and the right Y-axis represents the Value of Assets in million EUR (ranging from 0.6 to 1.8). The X-axis shows quarterly periods. The Value of Asset (blue bars) shows a general upward trend, starting at approximately 0.8 million EUR in 2014 Q4 and reaching about 1.4 million EUR by 2017 Q4. The Return of Asset (blue line) fluctuates, showing a significant peak of approximately 20% in 2016 Q2, followed by a sharp decline to around -10% in 2016 Q3, and then a recovery to about 10% by 2017 Q4.

Periods

Download all data
For this asset

Download most recent data
For this asset

Download performance over time
For this asset

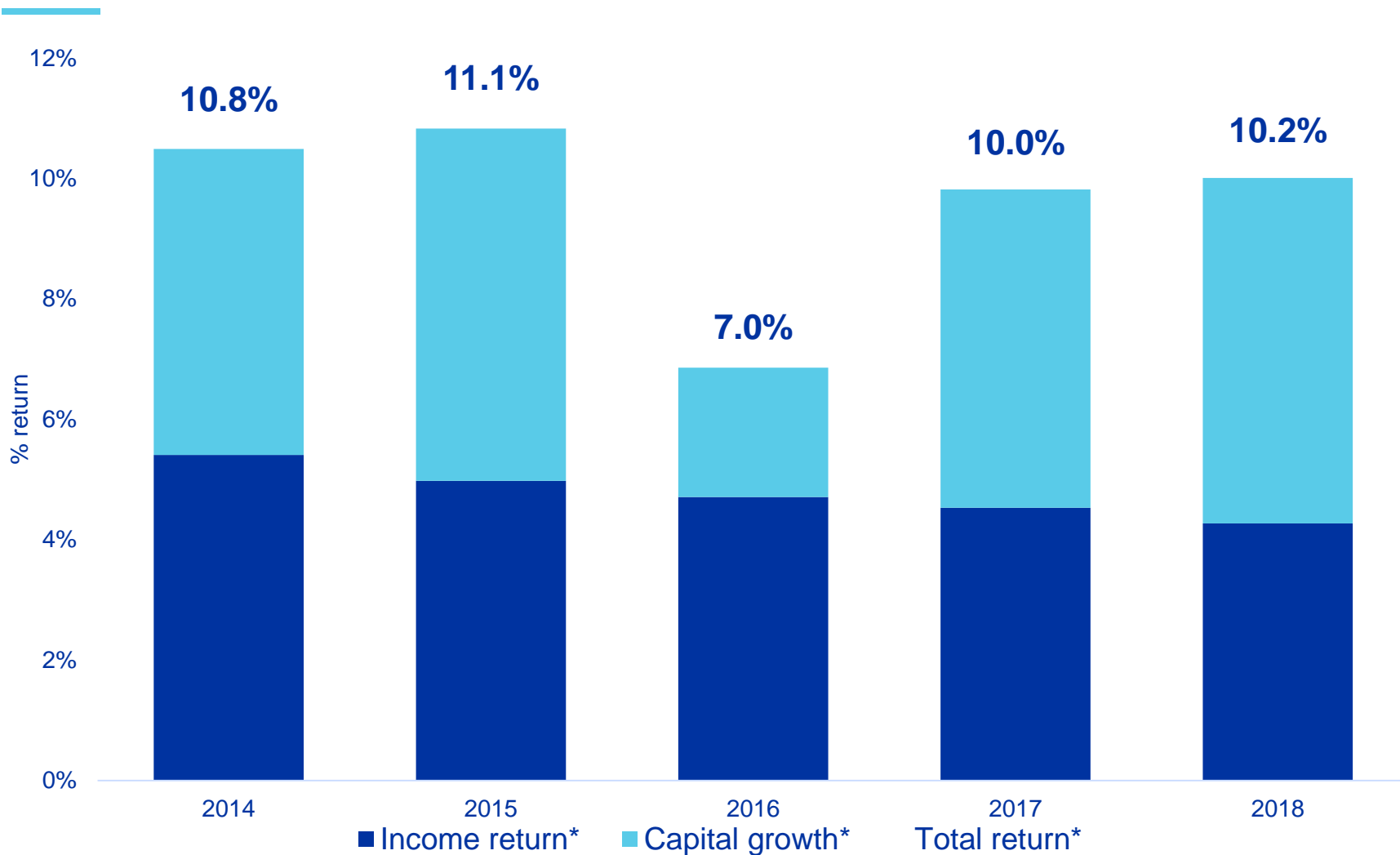
PERIOD	REPORTING FREQUENCY	ASSET LIFE CYCLE	OCCUPANCY RATE	ENDING MARKET VALUE	NOI	INCOME RETURN	CAPITAL RETURN	TOTAL RETURN	
2017 Q4	Quarterly	Standing investment/operating	100%	1 432 564 EUR Asset sold ↑	8 934.06 EUR	0.73%	26.78%	27.63%	Details...
2017 Q3	Quarterly	Standing investment/operating	100%	1 130 000 EUR	11 192.16 EUR	1.01%	2.63%	3.66%	Details...
2017 Q2	Quarterly	Standing investment/operating	100%	1 101 000 EUR	12 260.63 EUR	1.13%	2.13%	3.28%	Details...
2017 Q1	Quarterly	Standing investment/operating	91%	1 078 000 EUR	10 996.45 EUR	1.04%	1.79%	2.84%	Details...

WHERE WE ARE NOW

Launch at 2019 Annual Conference

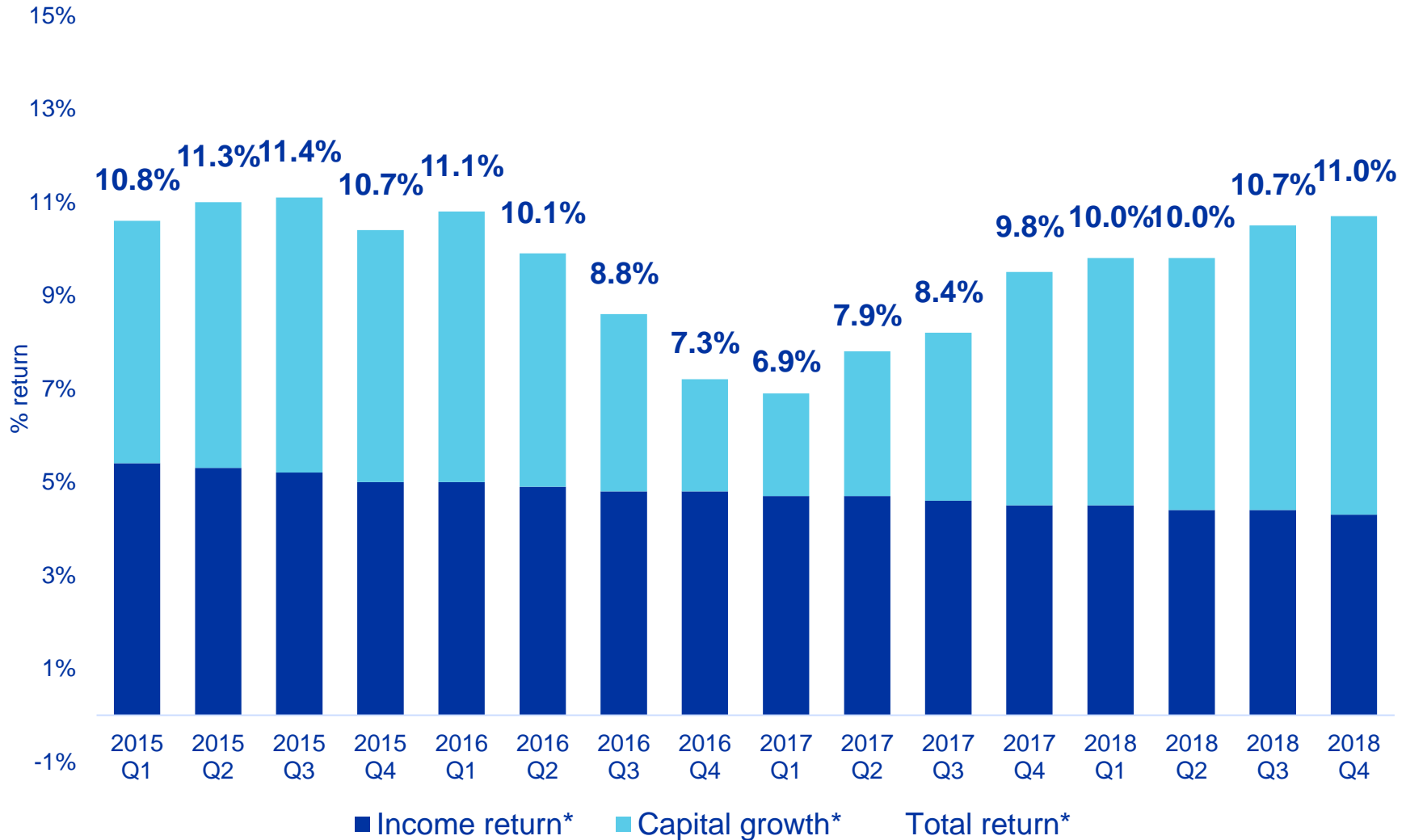


Five years of annual...



* In local currency

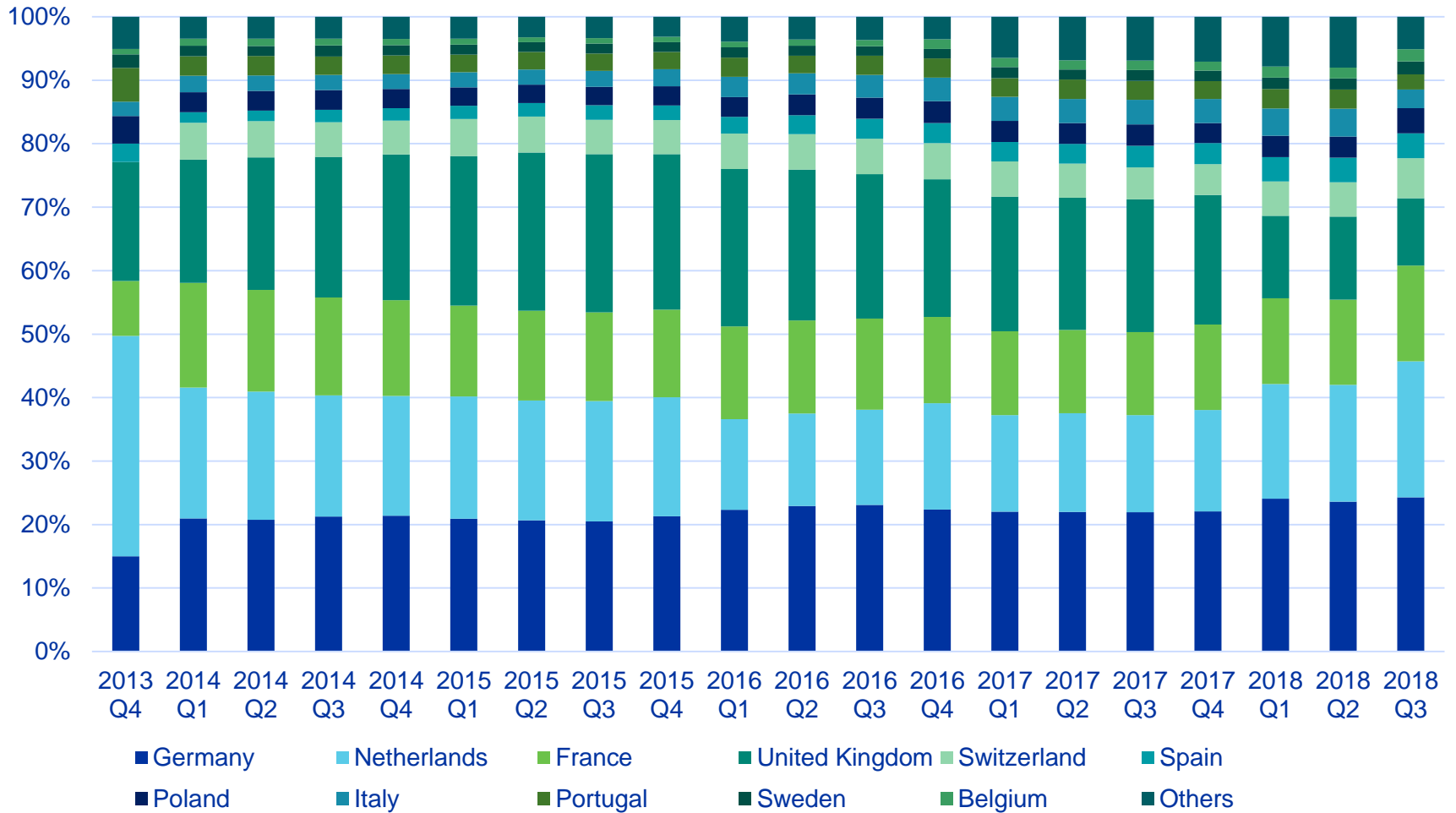
...and quarterly data from launch



* In local currency, quarterly annualised

Evenly spread across Europe

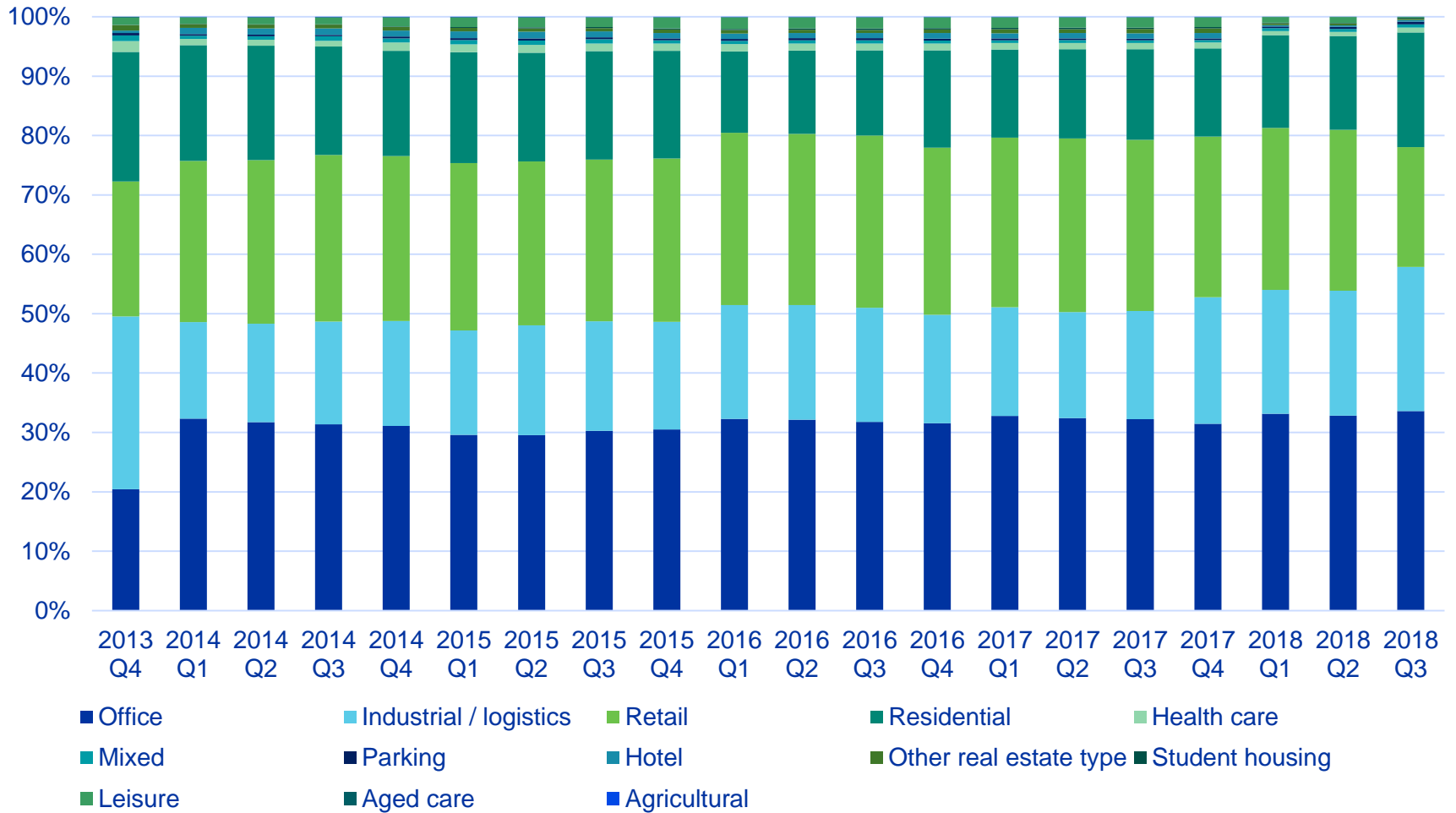
Index composition by country



Note: data is not yet audited/approved by INREV

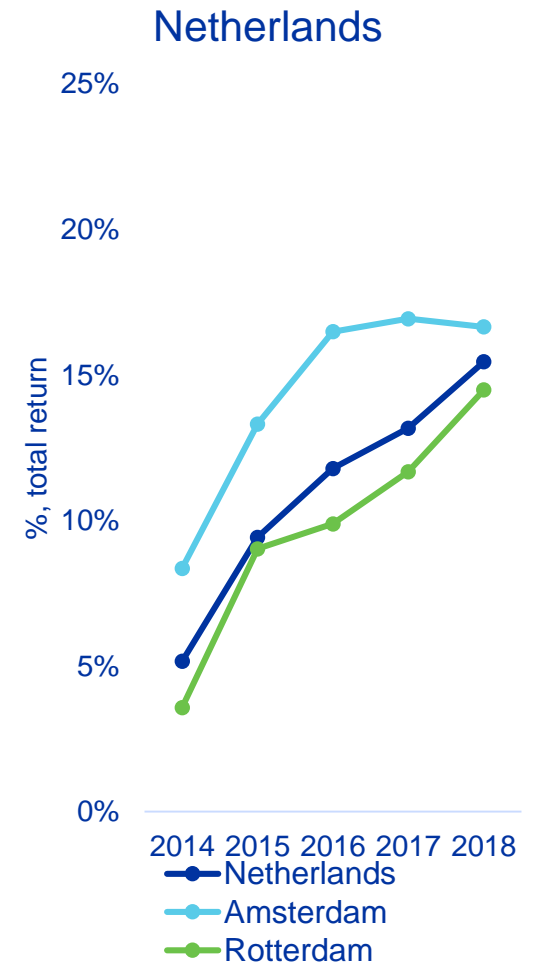
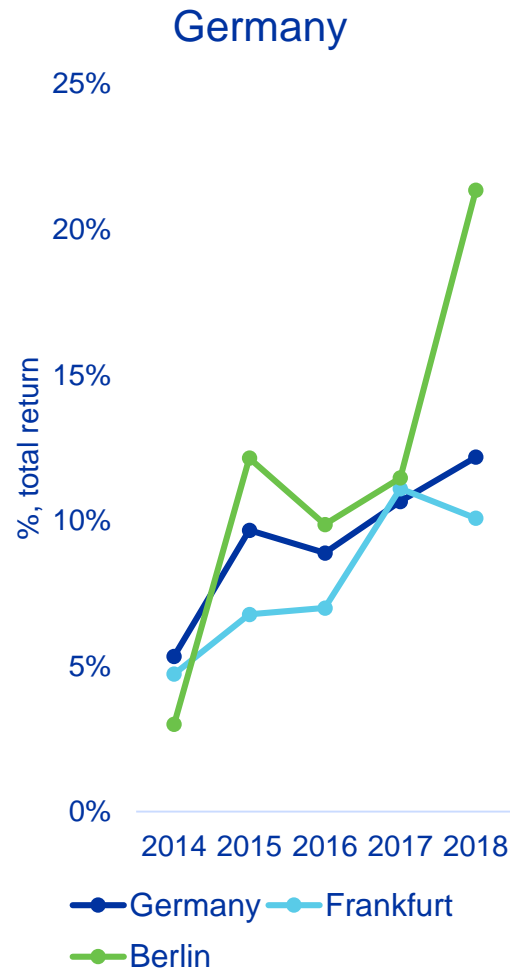
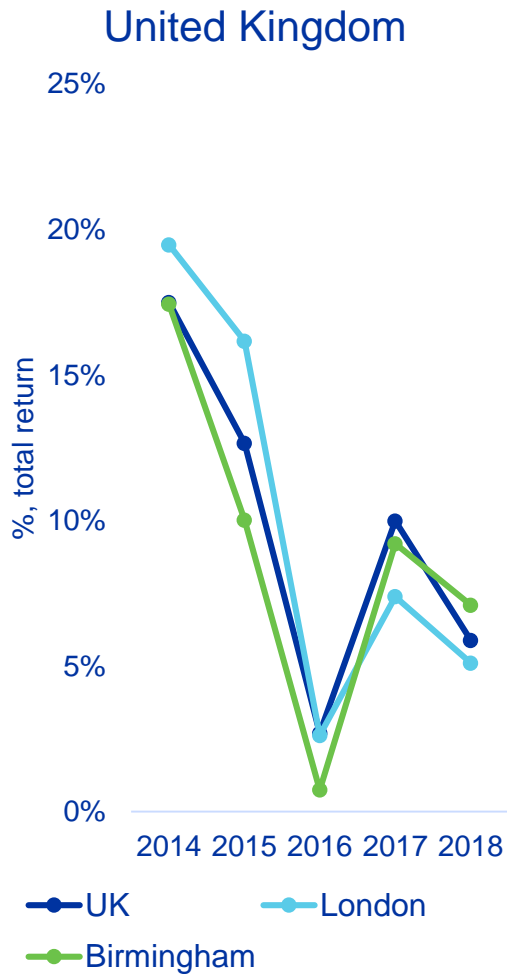
... and sectors

Index composition by sector



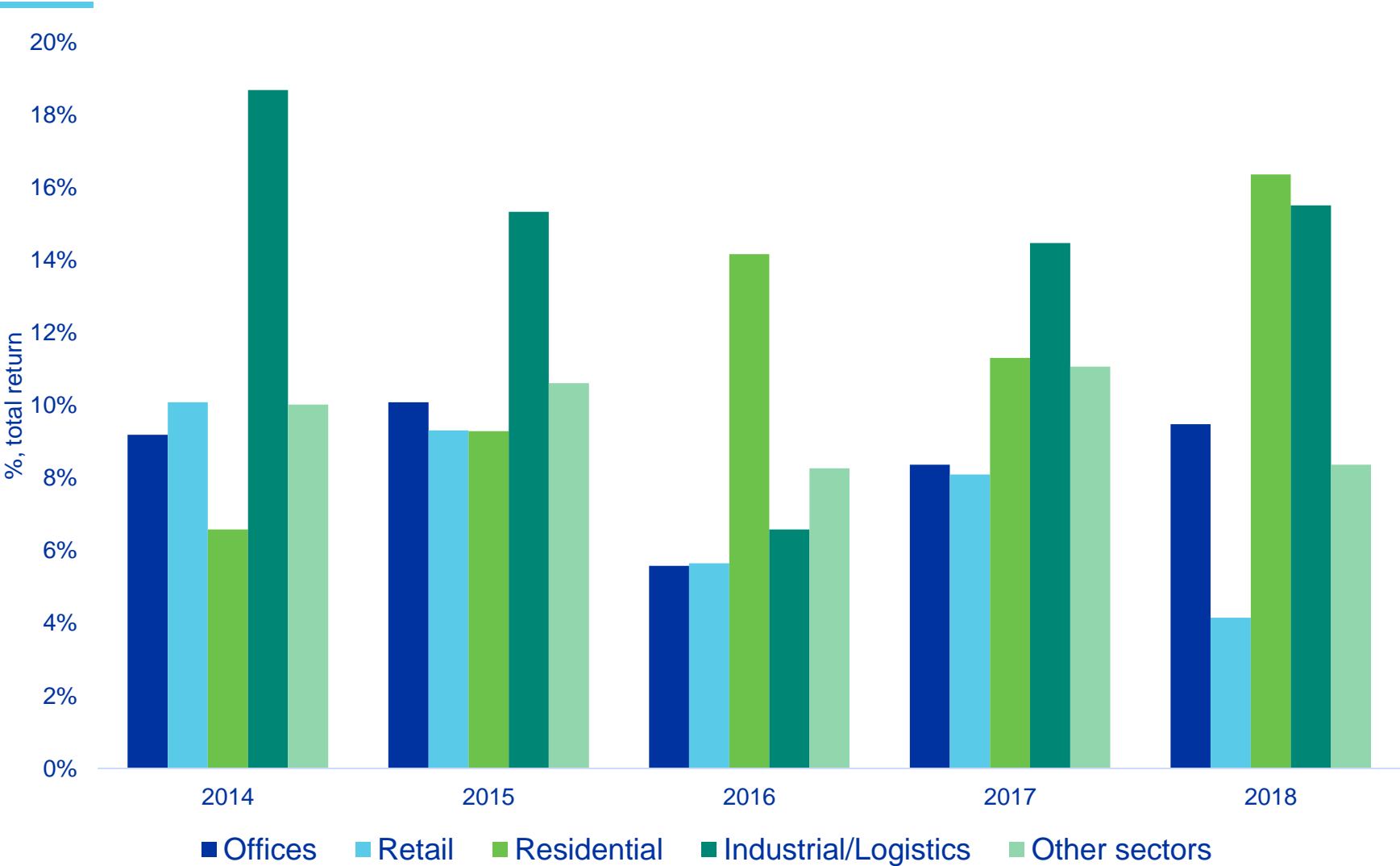
Note: data is not yet audited/approved by INREV

Country and city level performance



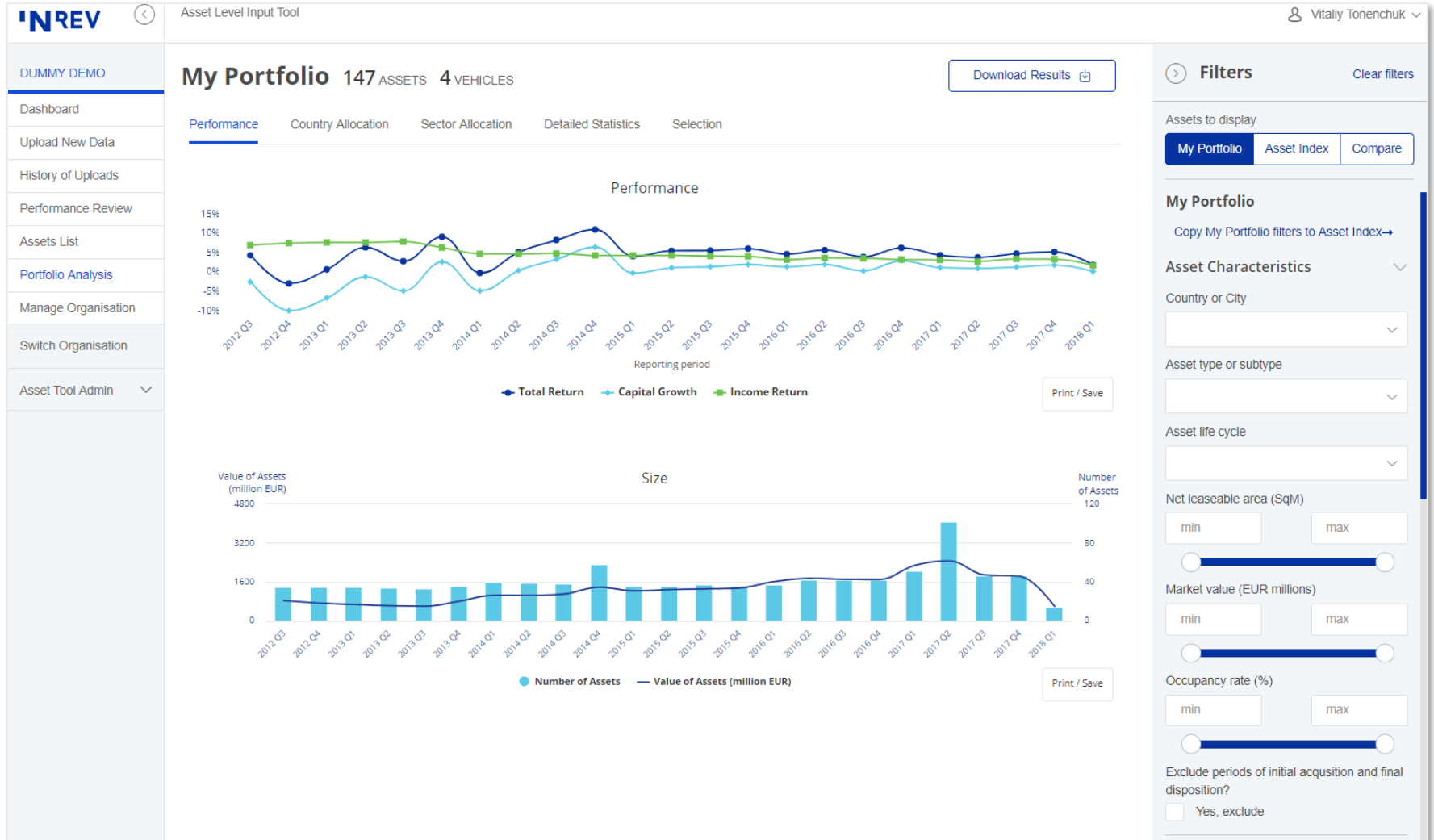
* In local currency

Sector comparison



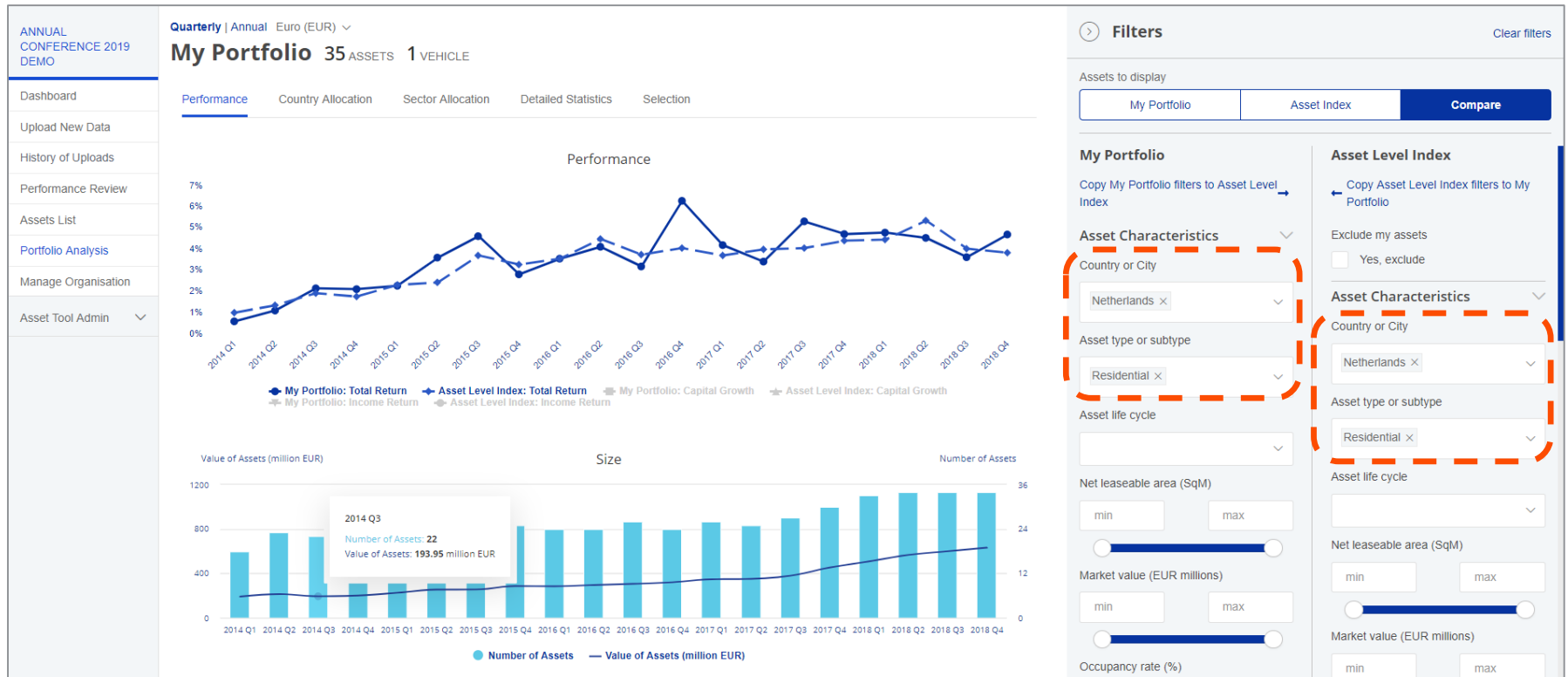
* In local currency

Portfolio analysis tool



Note: data is not yet audited/approved by INREV

Comprehensive analytical tools and reports



Detailed statistics for each selection

Asset Level Input Tool
Vitaliy Tonenchuk

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My Portfolio 147 ASSETS 4 VEHICLES

Performance
Country Allocation
Sector Allocation
Detailed Statistics
Selection

Download Results

	2012 Q3	2012 Q4	2013 Q1	2013 Q2	2013 Q3	2013 Q4	2014 Q1	2014 Q2	2014 Q3	2014 Q4	2015 Q1	2015 Q2	2015 Q3	2015 Q4
MY PORTFOLIO														
Total return %	4.33	-2.9	0.72	6.36	2.81	9.08	-0.21	5.17	8.26	10.92	4.09	5.48	5.57	6.04
Capital return %	-2.5	-9.86	-6.58	-1.19	-4.78	2.66	-4.77	0.47	3.33	6.45	-0.2	1.15	1.4	1.97
Income return %	6.94	7.45	7.63	7.61	7.84	6.31	4.71	4.69	4.82	4.29	4.3	4.3	4.13	4.02
Number of assets	35	35	35	34	33	36	40	39	38	58	36	36	37	36
Total market value (million EUR)	835.41	732.48	672.3	619.03	601.63	805.02	1051.84	1046.45	1103.15	1380.71	1232.33	1281.92	1313.23	1346.44
Total NOI (million EUR)	58.11	57.61	51.46	48.33	46.7	49.01	49.38	49.27	50.83	50.33	52.01	53.5	53.2	53.68
Total CAPEX (million EUR)	0.54	1.22	9	0.36	0	0.14	0.08	0.45	2.97	1.09	1.28	2.94	4.27	7.8
Total rental income (million EUR)	49	49.53	46.49	43.66	42.22	43.78	44.83	43.94	44.28	45	44.05	44.21	44.24	45.51
Total net leasable area (SqM)						85 069	170 303	170 303	170 303	219 555	170 303	170 303	170 303	170 303
Avg. Occupancy Rate %	0	0	0	0	0	12.98	19.28	19.77	20.41	24.59	20.85	21.12	20.91	21.26
INDEX VALUE														
Total returns	104.33	101.44	102.16	108.52	111.33	120.41	120.2	125.38	133.63	144.56	148.64	154.12	159.69	165.73
Capital returns	97.5	87.65	81.06	79.87	75.09	77.76	72.99	73.45	76.79	83.24	83.03	84.18	85.58	87.54
Income returns	106.94	114.4	122.03	129.64	137.49	143.79	148.51	153.2	158.02	162.3	166.6	170.9	175.03	179.05

Note: Index values are calculated starting at 100 in 2012 Q2

Filters Clear filters

Assets to display

My Portfolio
Asset Index
Compare

My Portfolio

Copy My Portfolio filters to Asset Index →

Asset Characteristics

Country or City

Asset type or subtype

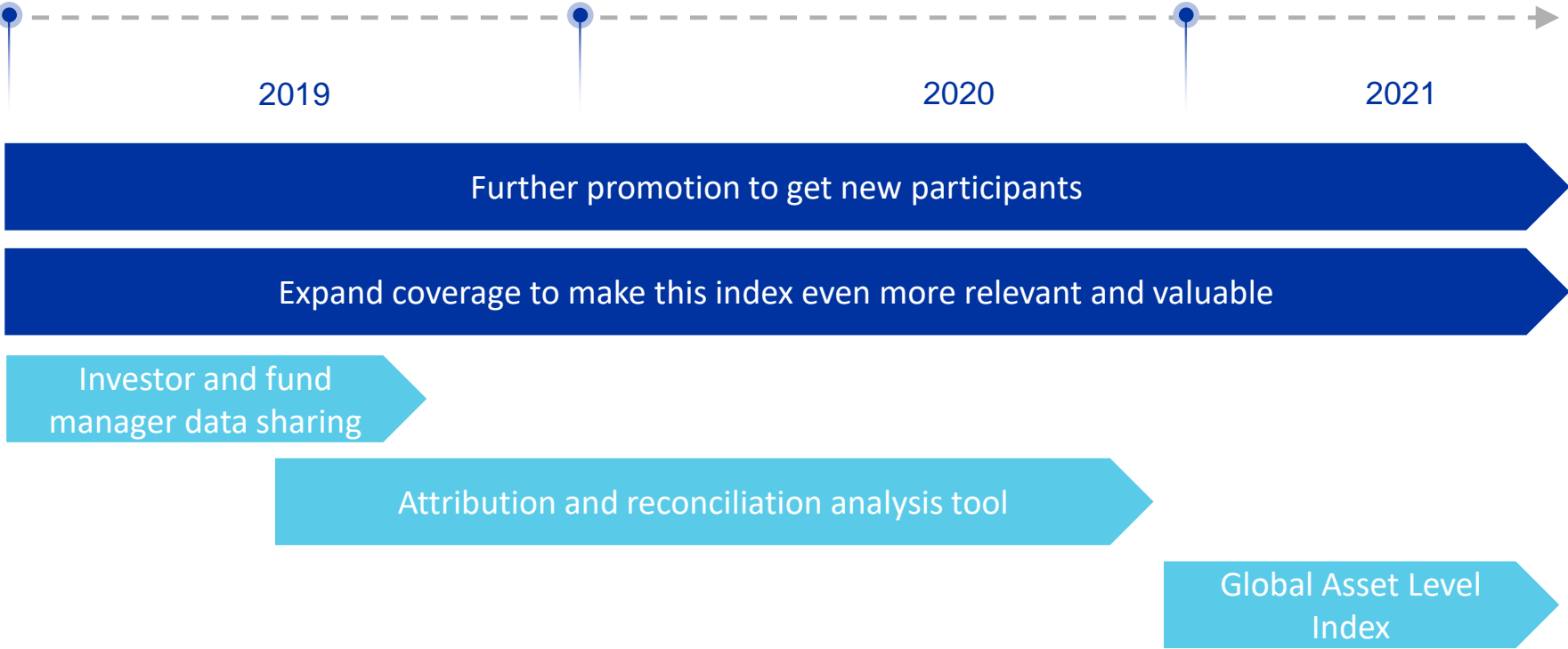
Asset life cycle

Net leaseable area (SqM)

Market value (EUR millions)

Occupancy rate (%)

What's next?

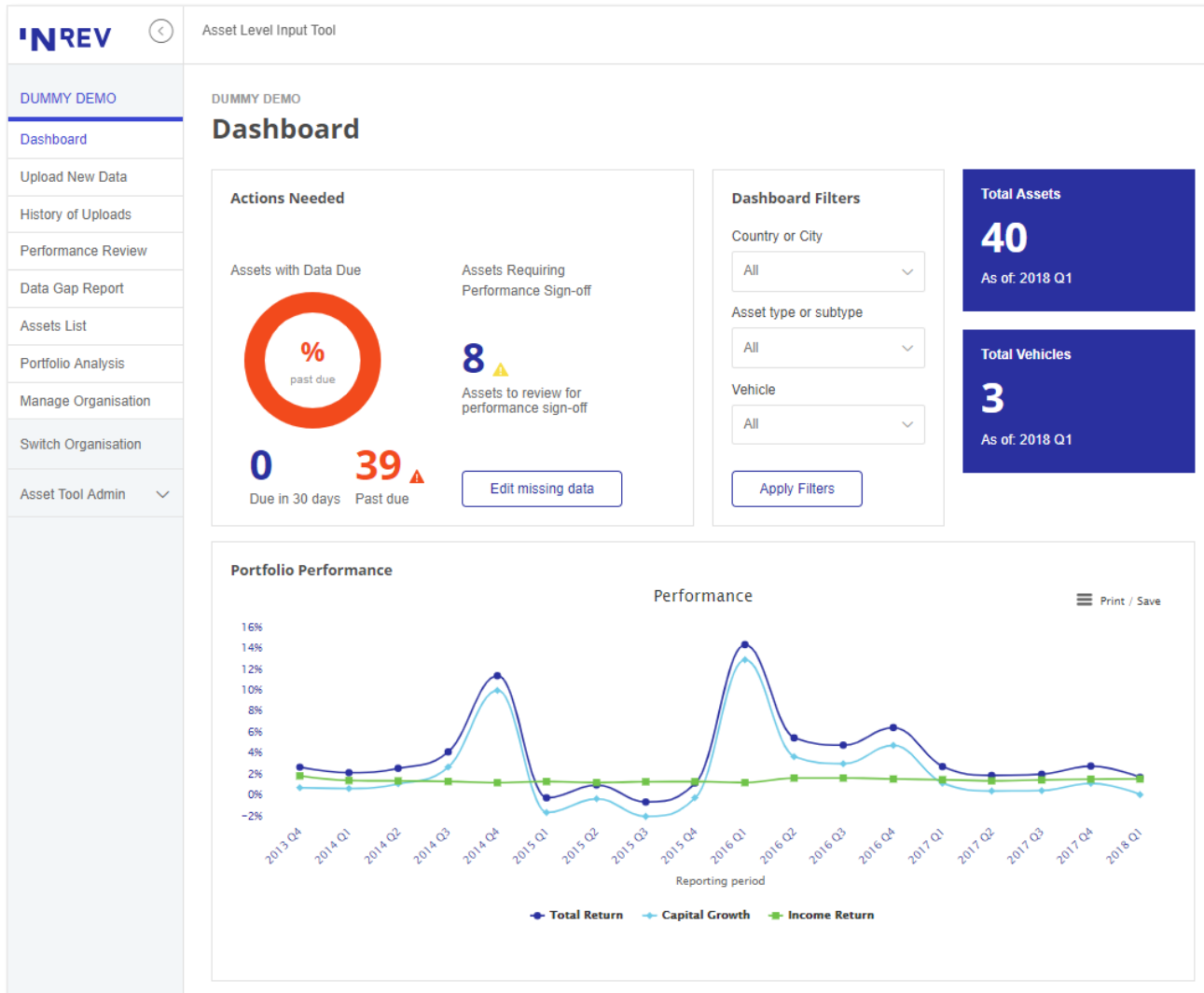


HOW TO PROVIDE DATA

Launch at 2019 Annual Conference



Data input tool launched in June



Simple validation and sign off process

INREV



Asset Level Input Tool

Vitaliy Tonenchuk

- 1. UPLOAD DATA
- 2. ERRORS
- 3. NEW ASSETS
- 4. SOLD ASSETS
- 5. WARNINGS
- 6. PERFORMANCE SIGN-OFF

Pending (255) Excluded (0) Pending Manager Sign-Off (0) Signed-off (0)



Search by Name/Asset ID

Filter by vehicle

Filter by reporting period

Exclude (100)

Sign off (100)

VEHICLE

REPORTING PERIOD: 2015 Q1 | ASSETS IN THIS UPLOAD: 66 | MARKET VALUE: 677 736 743.00 GBP | CAPEX: 662 036.78 | NOI: 6 442 530.59 | TOTAL RETURN: 3.47% | INCOME RETURN: 0.93% | CAPITAL RETURN: 2.53%

ASSET	MARKET VALUE	CAPEX	NOI	TOTAL RETURN	INCOME RETURN	CAPITAL RETURN	
12458 United Kingdom	11 905 069.00 GBP	0.00	120 306.10	1.82%	1.02%	0.79%	Exclude (66) Sign off (66)
12459 United Kingdom	6 702 150.00 GBP	0.00	57 048.29	1.17%	0.86%	0.31%	Exclude Sign off
12460 United Kingdom	5 974 479.00 GBP	0.00	76 607.33	5.26%	1.32%	3.90%	Exclude Sign off
12461 United Kingdom	50 925 000.00 GBP	175 645.20	740 065.70	1.66%	1.46%	0.20%	Exclude Sign off
12462 United Kingdom	0.00 GBP	18 028.00	-46 179.90	-1780.80%	-480.79%	-100.00%	Exclude Sign off
12463 United Kingdom	13 400 000.00 GBP	54 444.45	-108 363.00	10.71%	-0.87%	11.64%	Exclude Sign off
12464 United Kingdom	970 000.00 GBP	0.00	19 162.01	-16.32%	1.26%	-17.45%	Exclude Sign off
12465 United Kingdom	6 550 000.00 GBP	8 392.31	-60 583.30	-1.05%	-0.92%	-0.13%	Exclude Sign off
12466 United Kingdom	4 460 000.00 GBP	0.00	80 927.34	-0.20%	1.80%	-1.98%	Exclude Sign off
12467 United Kingdom	0.00 GBP	0.00	24 588.83	0.00%	0.00%	0.00%	Exclude Sign off

Asset performance analysis

INREV
Asset Level Input Tool
Vitaliy Tonenchuk

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Office	Office	UBS		1.0%	Freehold	No	SqF	45255.0	0

Acquisition date	21 August 2015
Acquisition price	38 250 000.00 GBP
Latest market value	61 000 000.00 GBP
Date of latest market value	31 December 2017
One year return	25.95%
Three year return	n/a
Five year return	n/a

● Value of Asset (million EUR) — Return of Asset

Periods

[Download all data](#)
For this asset

[Download most recent data](#)
For this asset

[Download performance over time](#)
For this asset

PERIOD	REPORTING FREQUENCY	ASSET LIFE CYCLE	OCCUPANCY RATE	ENDING MARKET VALUE	NOI	INCOME RETURN	CAPITAL RETURN	TOTAL RETURN	
2017 Q4	Quarterly	Standing investment/operating	1%	61 000 000	2 830 000.00 GBP	4.64%	-2.09%	2.49%	Details...
2017 Q3	Quarterly	Standing investment/operating	1%	62 300 000	2 830 000.00 GBP	4.68%	2.26%	7.01%	Details...

WHAT WE ASK FOR

Join this industry initiative



INREV

Join now for 100% discount on year 1 fee

First year – 100% discount to data contributing investors and managers

EUR 7,500
annual fee*

Historical data
starting from
Q4 2013

3 years of
data going
forwards

Non-data contributing investors pay an annual fee of EUR 15.000

*applies to data contributing managers and investors

Join the club

Standard Life Aberdeen

AEW

ALTERA
VASTGOED NV

AMVEST

ASR
vastgoed

AXA Real Estate
An AXA Investment Managers Company

Bouwinvest

CATELLA

CBRE
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ROCKSPRING

Hines

Invesco

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