

The financial impact of the EU Sustainability Taxonomy

A joint work by EC JRC – UZH – ECB
supporting the EC TEG on Sustainable Finance

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Structure of the analysis

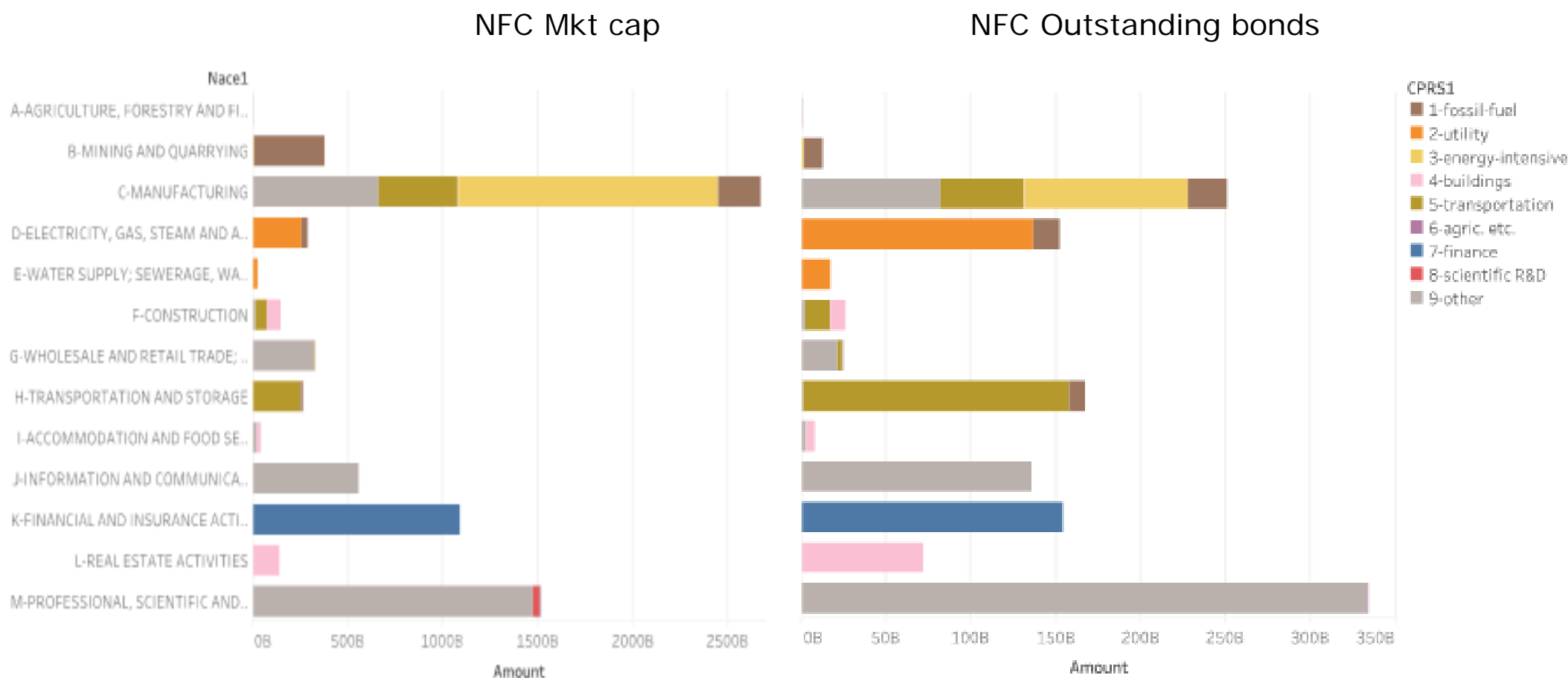
- Step 1: review of available estimates of additional investment needs for low-carbon transition under various scenarios, at macro level
- Step 2: stock-taking across holders and securities, including:
 - Analysis of exposures to climate-policy-relevant sectors (CPRS)
 - Estimate of Taxonomy-eligible market share
- Step 3: assessment of impact of EU taxonomy on capital markets under different trajectories

Data

- Confidential security-by-security data shared by ECB (Securities Holding Statistics)
- Equities and bonds issued by European NFCs
- FTSE Russell Green Revenues and Climate Bond Initiative data to cross-check Taxonomy-eligibility estimates

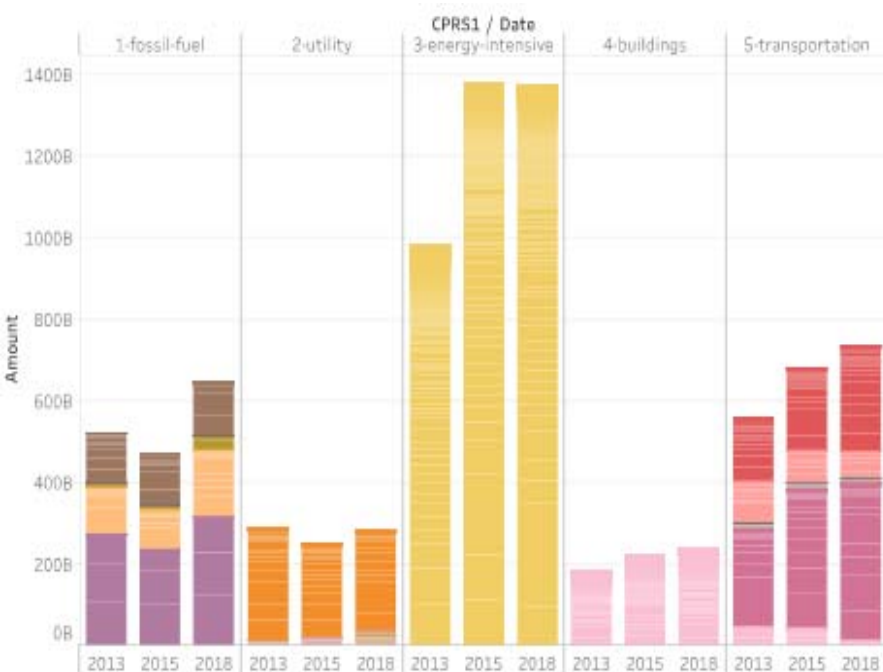
From NACE to CPRS sectors

Mapping by Battiston et al. (2017, NCC)

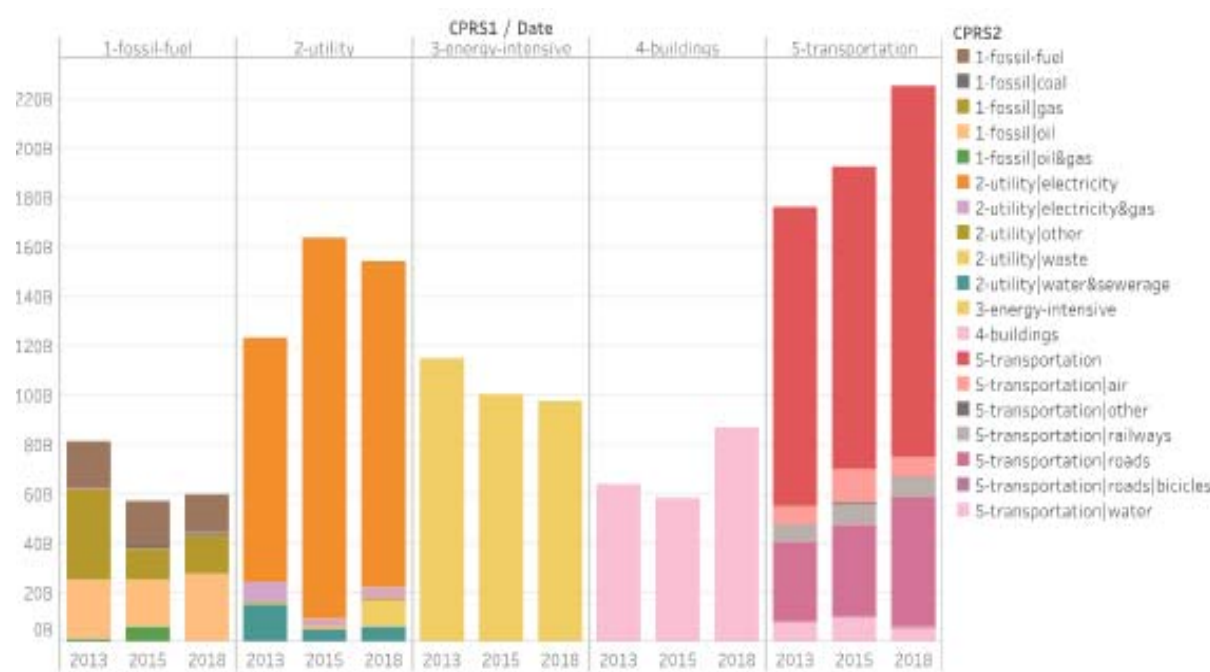


Climate-policy-relevant subsectors

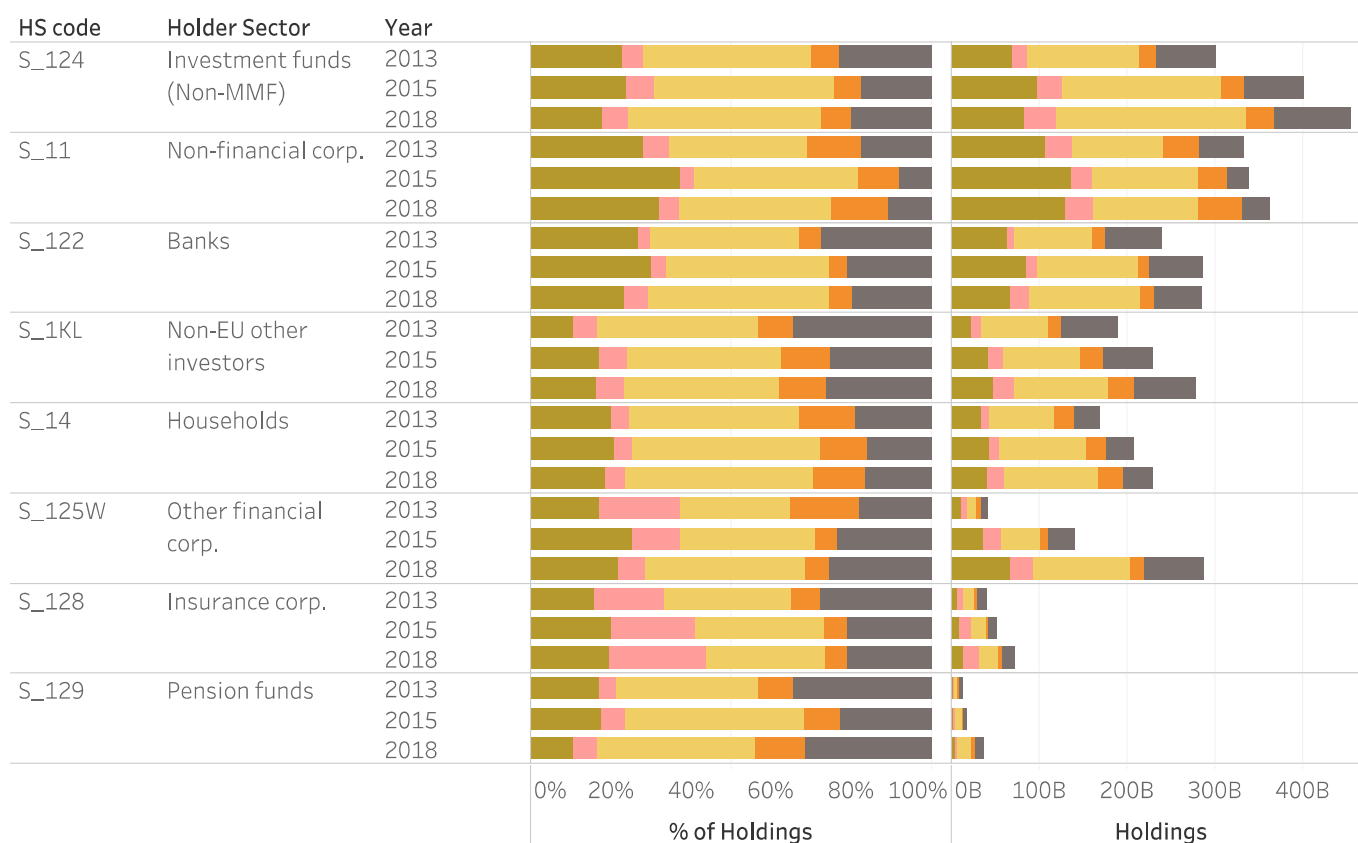
NFC Mkt cap



NFC Outstanding bonds



Investors' exposures to climate-policy-relevant sectors – NFC equities

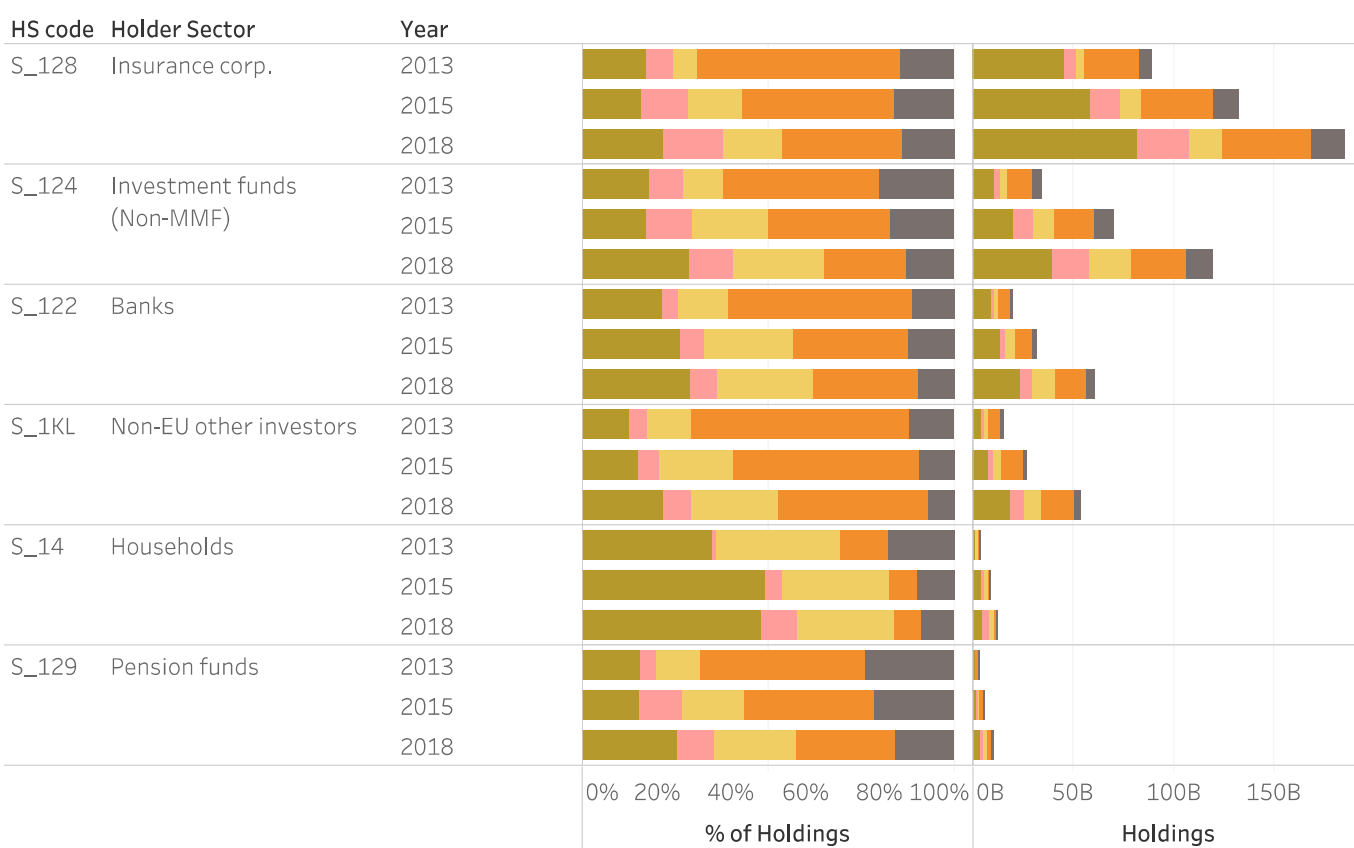


CPRS1

- 1-fossil-fuel
- 2-utility
- 3-energy-intensive
- 4-buildings
- 5-transportation

Holder Sector	Exposure to CPRS	Total (€ bn)
Investment funds (Non-MMF)	41.0%	1120
Non-financial corporations	30.5%	1031
Banks	36.4%	780
Non-EU other investors	41.2%	678
Other financial corporations	45.6%	645
Households	42.1%	558
Insurance corporations	40.9%	176
Pension funds	43.1%	85

Investors' exposures to climate-policy-relevant sectors – NFC bonds

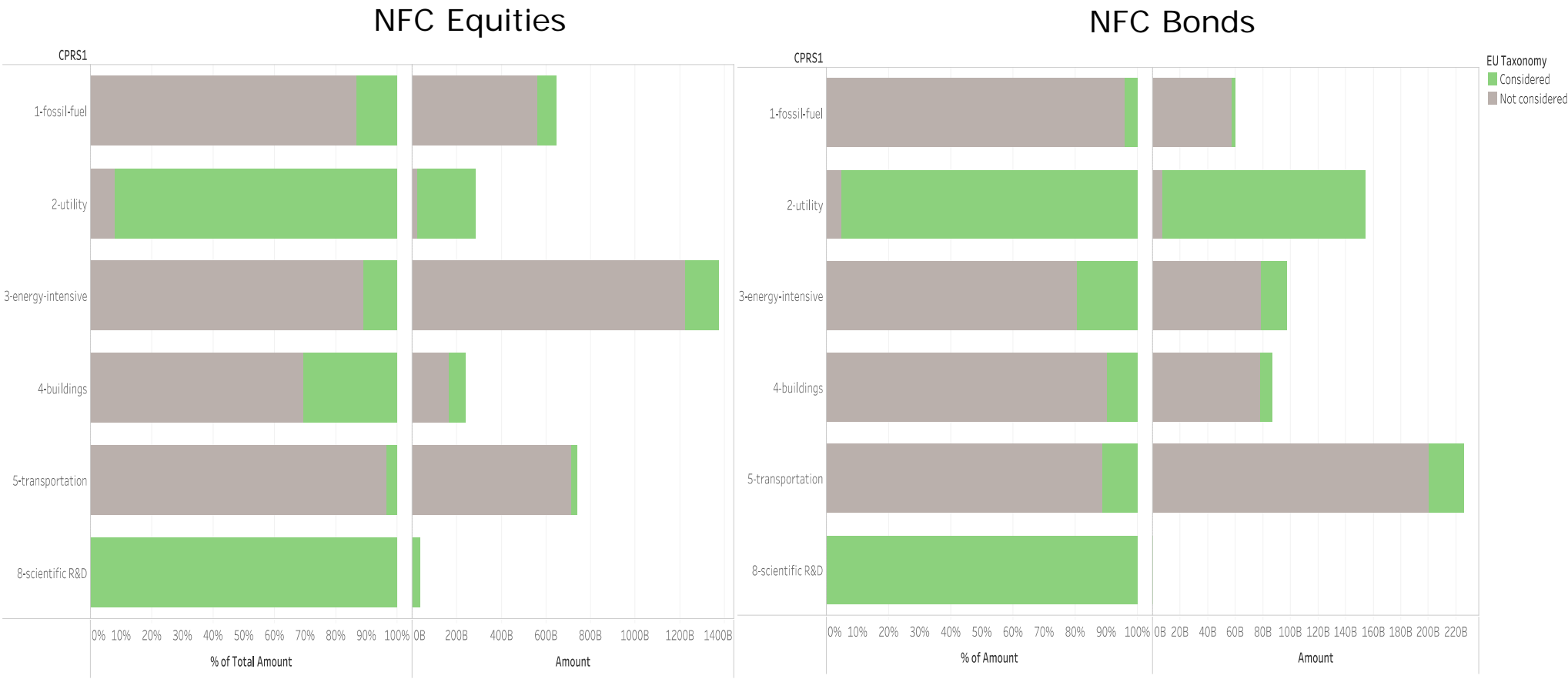


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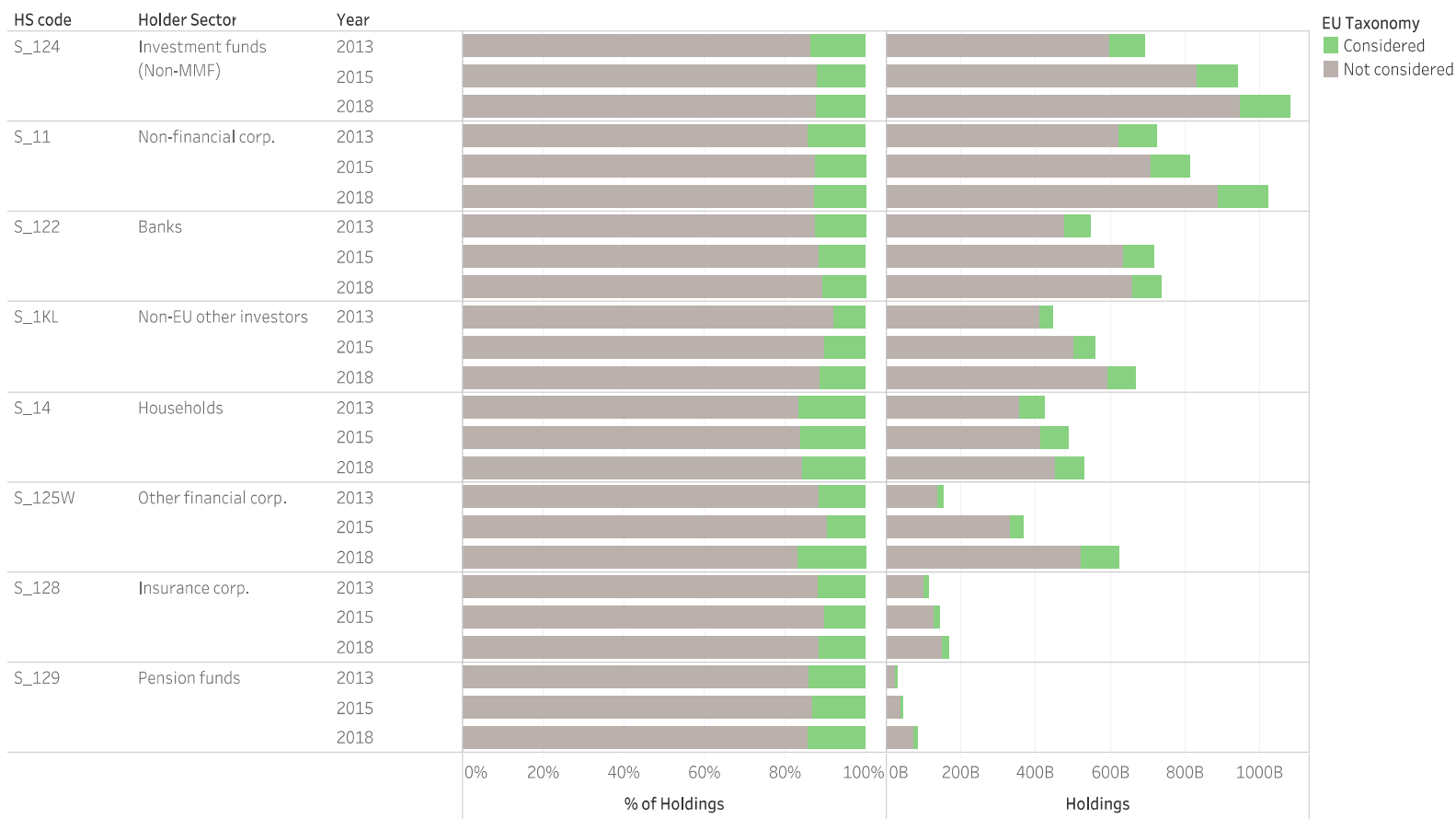
Holder Sector	Exposure to CPRS	Total (€ bn)
Insurance corporations	47.7%	321
Investment funds (Non-MMF)	36.8%	295
Non-EU other investors	38.4%	137
Banks	40.5%	136
Money market funds (MMF)	44.2%	34
Households	36.5%	33
Pension funds	39.0%	23

Market coverage of the Taxonomy



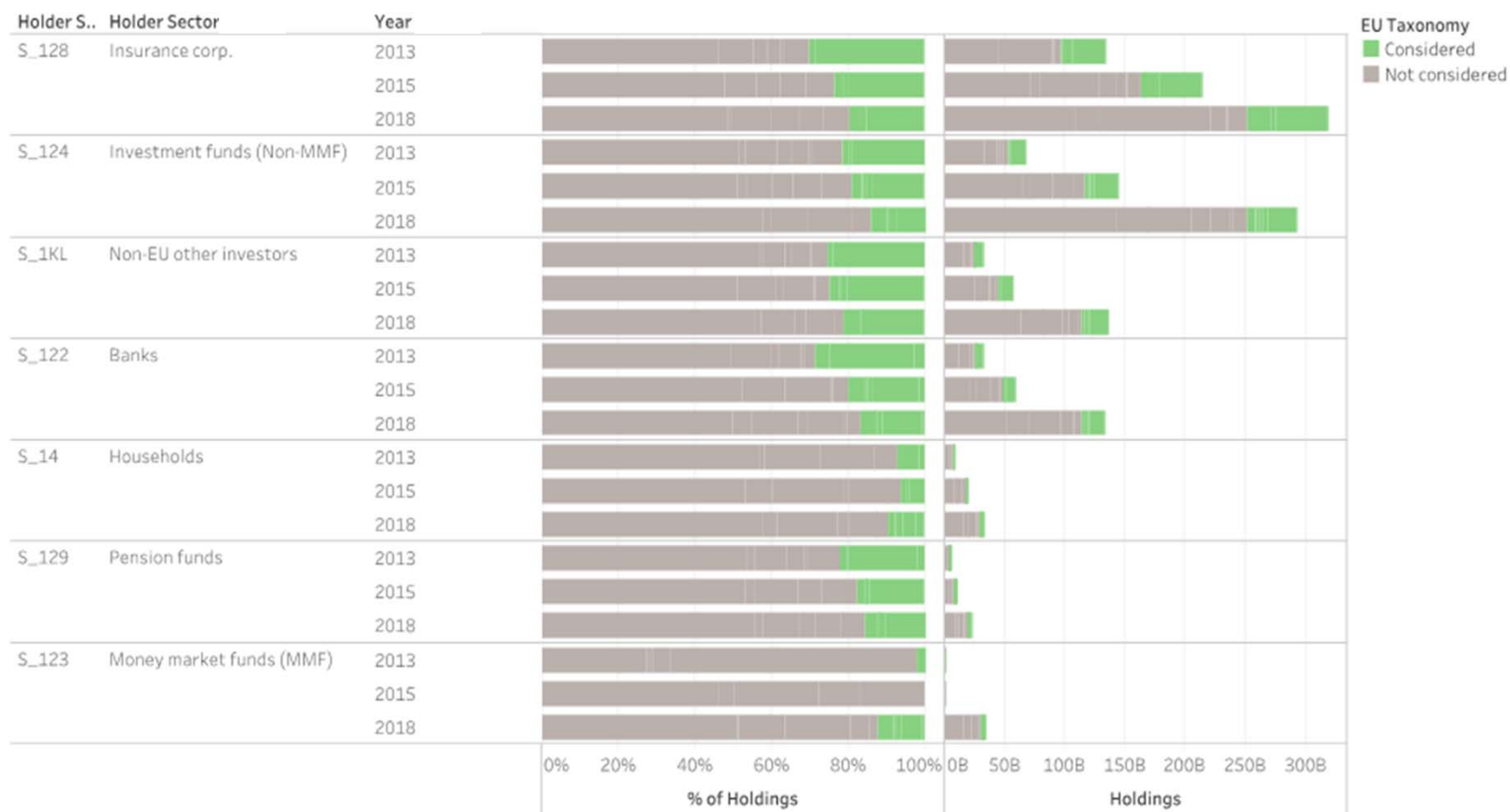
Taxonomy-considered holdings

NFC Equities



Taxonomy-considered holdings

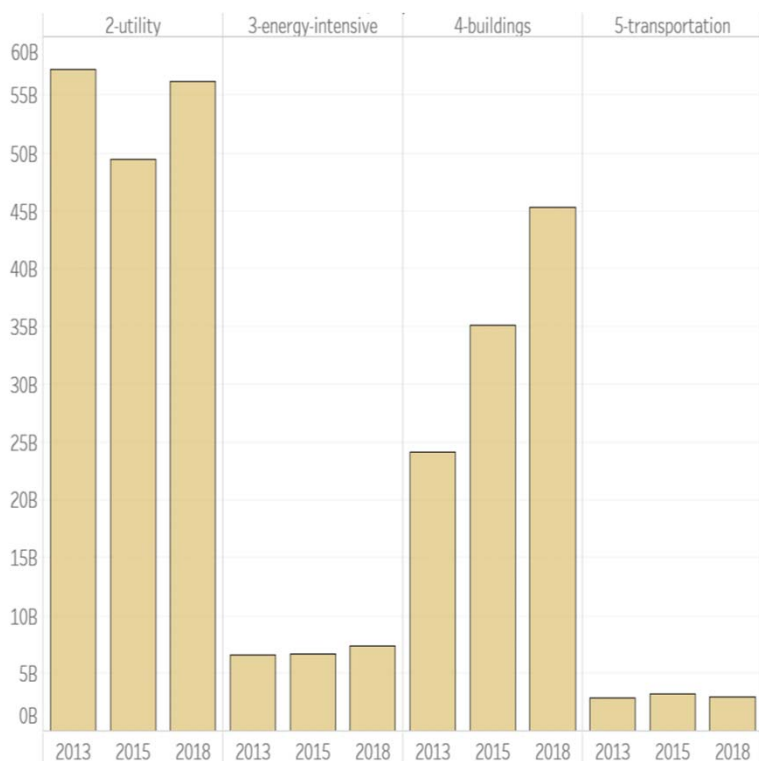
NFC Bonds



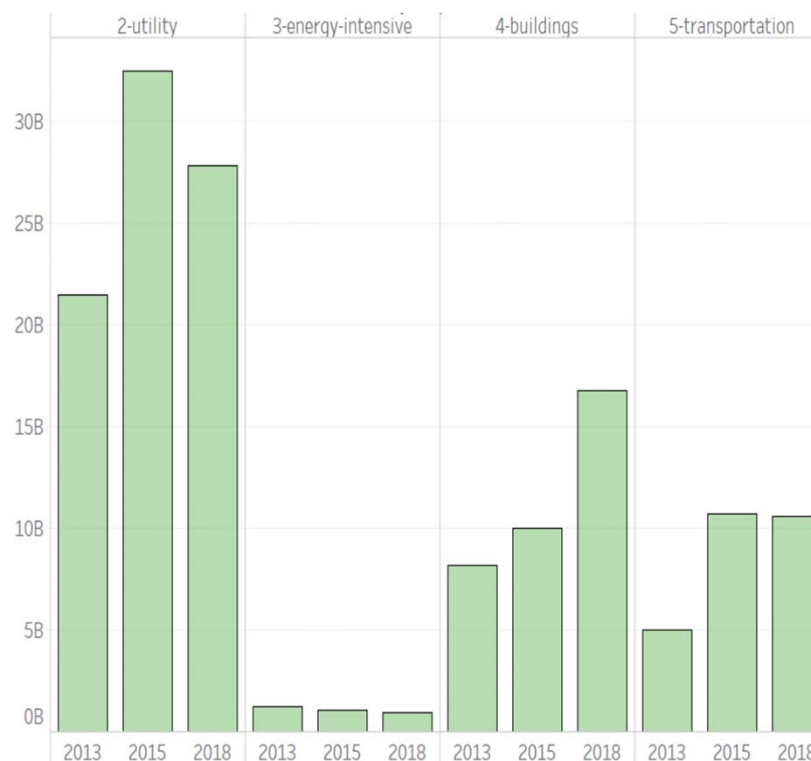
Estimate of Taxonomy-eligible market share

NFC Bonds

NFC Equities



NFC Bonds



Sector	Bonds (€ bn)	Equities (€ bn)
Buildings	16.74	45.35
Energy Intensive	0.95	7.37
Transport	10.59	2.85
Utility	27.82	56.17

Scenario analysis

Taxonomy financial impact – EUR bn

Sector		Scenarios	
		least stringent	most stringent
Utility	Investment gap	14	-5
	Gap funded by bonds	6.0	-2.1
	Gap funded by loans	8.0	-2.9
Energy Intensive	Investment gap	2	36
	Gap funded by bonds	0.29	5.3
	Gap funded by loans	1.7	31
Transport	Investment gap	26	35
	Gap funded by bonds	10	13
	Gap funded by loans*	16	22
Buildings	Investment gap	48	562
	Gap funded by bonds	2.2	26
	Gap funded by loans	46	536
Total investment gap		90	628