



Natural Capital Compass

Climate Change & Natural Capital

13 October 2017

Bigger than carbon: a systemic view

What's it all about?

Think of the environment as a system that is too big to fail. The global value of ecosystems has been partly estimated at c. USD125trn a year. However, resources are being exhausted and polluted faster than ever. We estimate that in 2015, the companies under our coverage alone were responsible for EUR2trn in damages to society through carbon emissions, but also water consumption, land occupation, and air and water pollution. Around 45% of these companies would not be profitable if they had to pay for these damages, which we see increasingly as financially-relevant. In this investor's guide, we have cherry-picked the most innovative and promising approaches to put carbon into a wider environmental perspective and show how they can be used to assess net impact and value-at-risk.

With a case study from

eftec
economics for
the environment

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TRANSITION RESEARCH

Bigger than carbon: a systemic view
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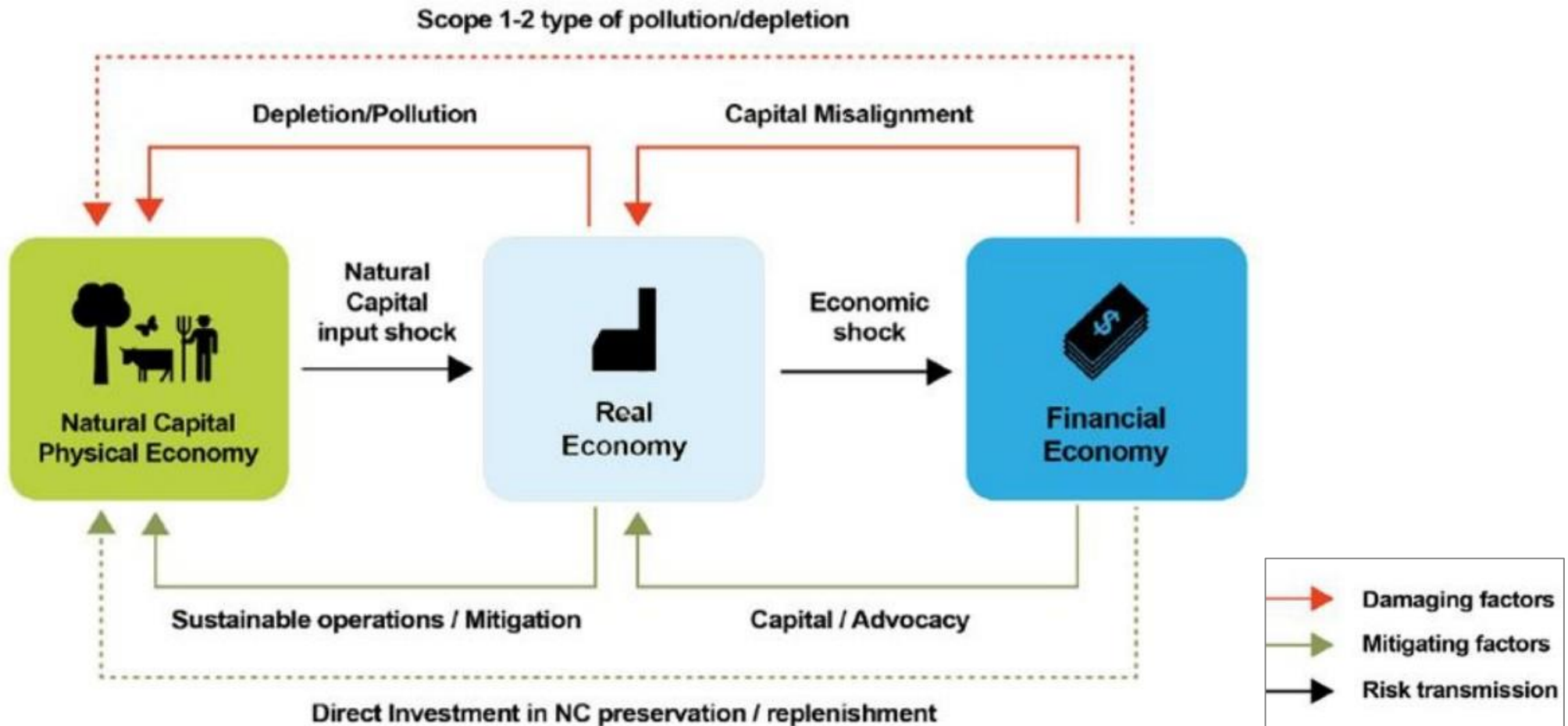
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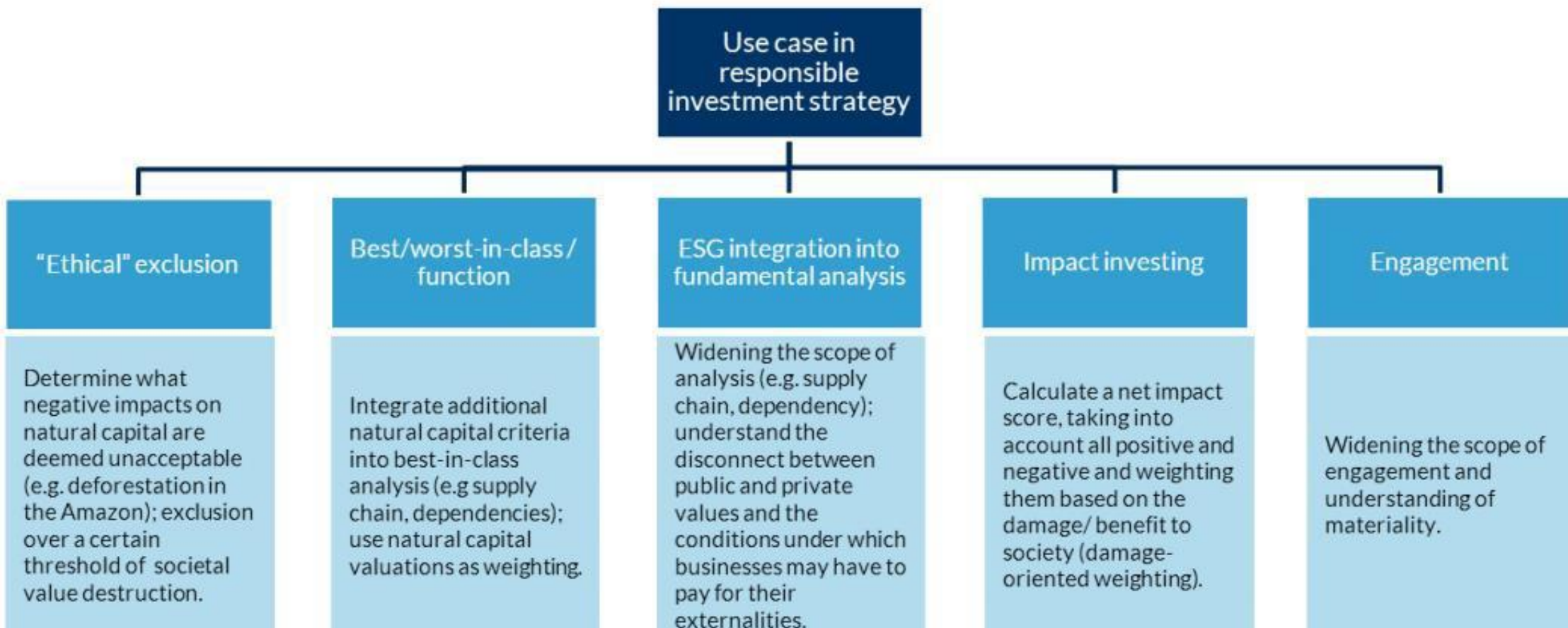
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Think about the environment as a system too big to fail

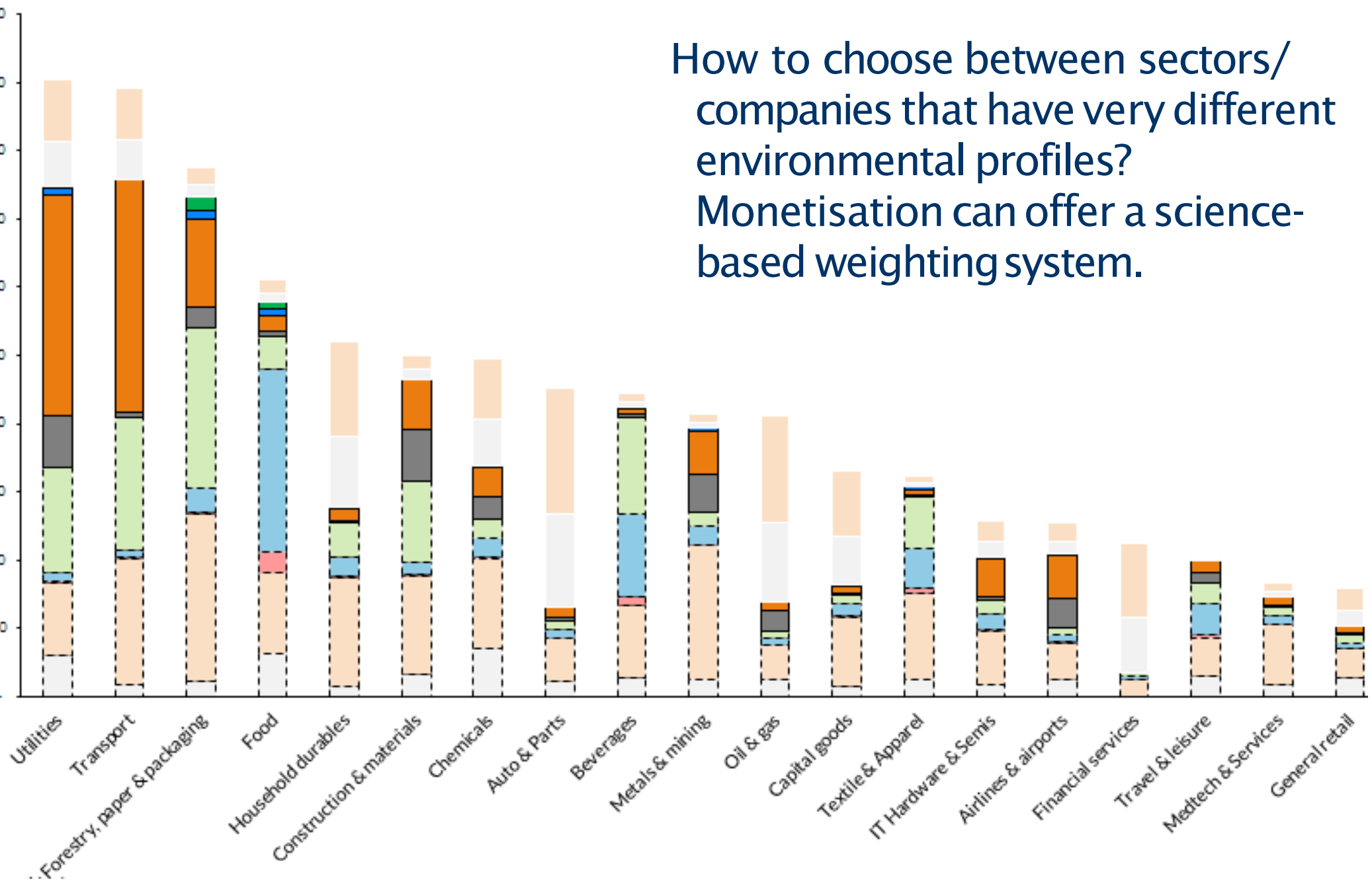


Source: Natural Capital Financial Alliance. In this report, we only explore the "full" lines, i.e. impacts linked to investments in companies that are themselves exposed to the environment.











All “responsible” investors are unique

How to choose between sectors/
companies that have very different
environmental profiles?
Monetisation can offer a science-
based weighting system.



Health is more than pharma and nutrition! Relative health impact of vegetables and cattle based on 1/ nutrition and 2/ health impact of their production because of the emission of pollution e.g.

	Health impacts				
	Related to environmental pressures:				Nutrition
	Climate change	Water consumption	Air pollution	Health impacts as a proportion of total environmental impact	
Cultivation of vegetables, fruit, nuts				Over 50%	
Cattle				Less than 25%	

Complementing traditional financial accounts to understand dependencies on natural capital

Reporting year: 2016. Time period over which assets and liabilities are estimated: 100 years. WACC: 5.25%.

		Value to business €'m	Value to society €'m	Total Value €'m	Of which reported in financial accounts €'m
Assets					
1	Timber	3,250		3,250	3,250
2	Biofuels	1,516		1,516	
3	Seedlings	257		257	-
4	Carbon sequestration		2,728	2,728	-
5	Recreational benefits		<1	<1	
6	Wider social benefits		4,617	4,617	-
Gross asset value		5,023	7,346	12,369	3,250
Liabilities					
6	Maintenance provisions	(3,161)		(3,161)	-
7	Resource provisions		0	0	-
Total liabilities		(3,161)	0	(3,161)	-
8	Retained earnings to stakeholders		(190)	(190)	
Total Net Natural Capital		1,862	7,155	9,018	3,250

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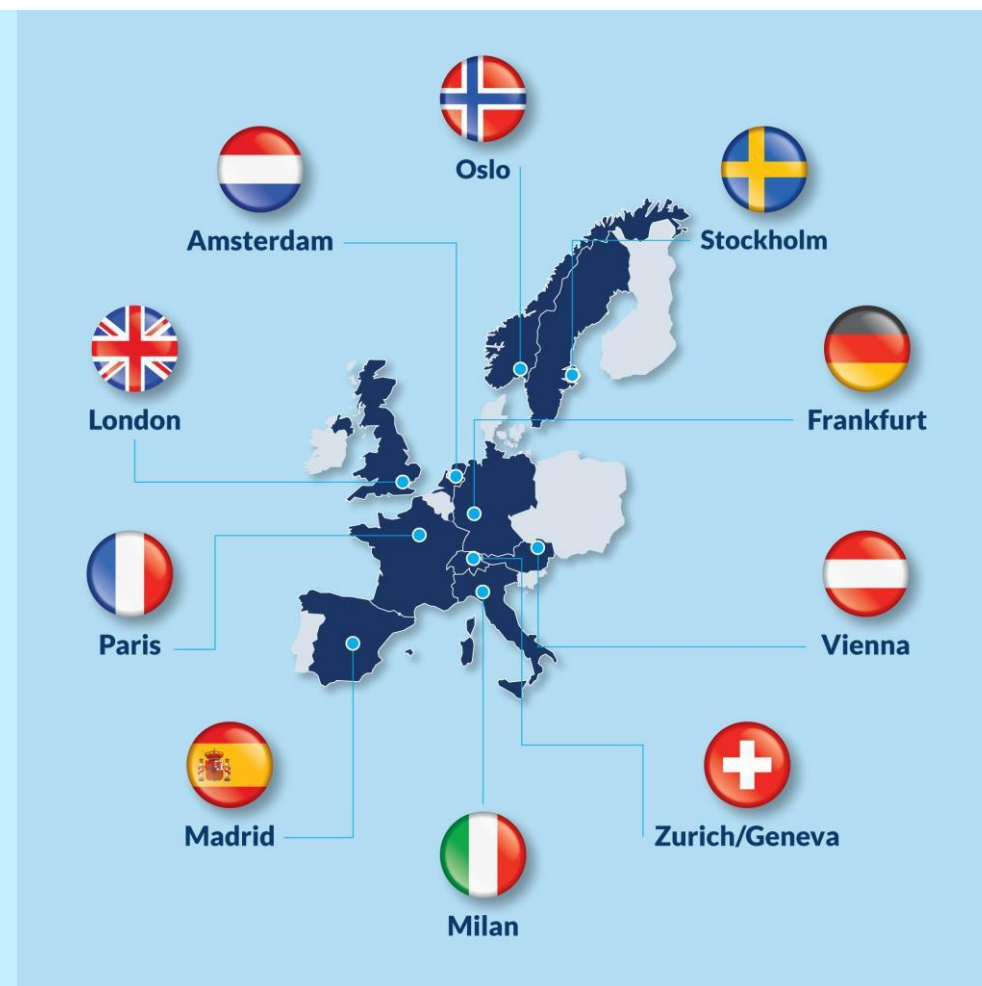
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