Cement's pollution windfall from the EU ETS during 2008-2015

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Cement and the EU ETS

- Cement is responsible for 5% of global greenhouse gas (GHG) emissions
- The EU Emissions Trading System (EU ETS) - the EU's main instrument to decarbonise cement - has failed to deliver so far.

  The EU ETS regulates about half of EU's CO2 by setting a limit on the total volume of GHG emissions that industry and power installations can emit ('cap and trade'). Currently, the cement sector receives allowances for free since it is considered to be at risk of "carbon leakage".

  "Carbon leakage" refers to the hypothetical situation where companies transfer production to countries with weaker climate policies in order to lower their costs.

- Cement emissions have increased due to the EU ETS rather than decreased under the current rules*

*Sandbag, *The Final Carbon Fatcat* (03/2016); also : *Cement exposed. What now for the ETS Fatcat* (10/2016)

Five problems related to the current system of free allocation

1. **No evidence for "carbon leakage"** or production displacement due to the EU ETS.
2. **Current EU ETS rules over-subsidise industry pollution**. Free allocation has resulted in significant profits for corporations.
3. **European taxpayers are picking up the bill** as governments forego scarce public money.
4. Without a change of the rules, **emission reductions of industry will stall over the next 15 years**.
5. **The Paris agreement will help level the playing field** across the global economy

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updated CE Delft report:* Industry earned a €25 billion pollution windfall under the EU ETS

- **€7.5 billion** windfall profits from **surplus**
- **€0.8 billion** windfall profits from **offsets**
- **€16.8 billion** windfall profits from **cost-pass through**

*CE Delft (forthcoming), *Update of the calculation of additional profits of sectors and firms in the EU ETS 2008-2015*

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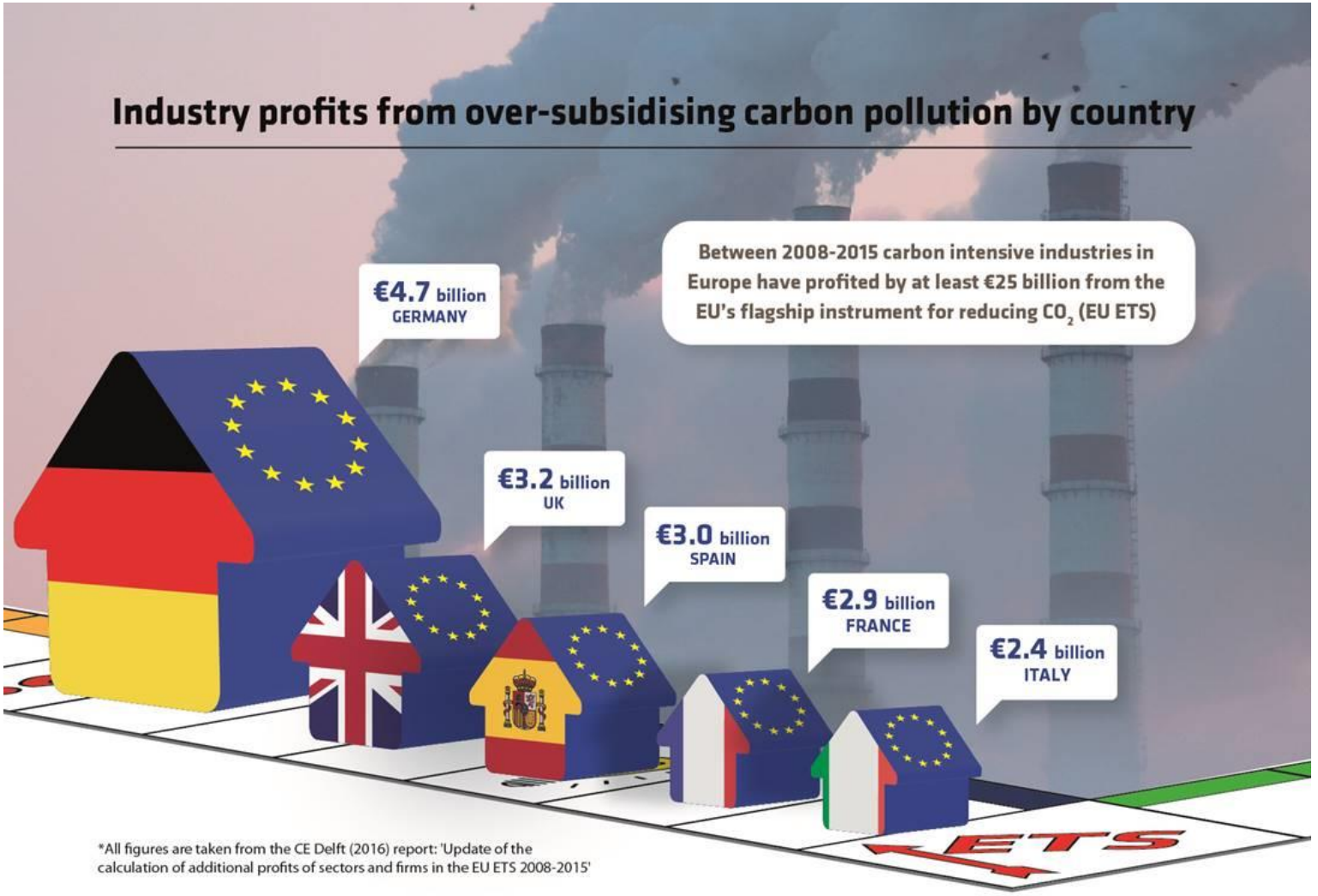
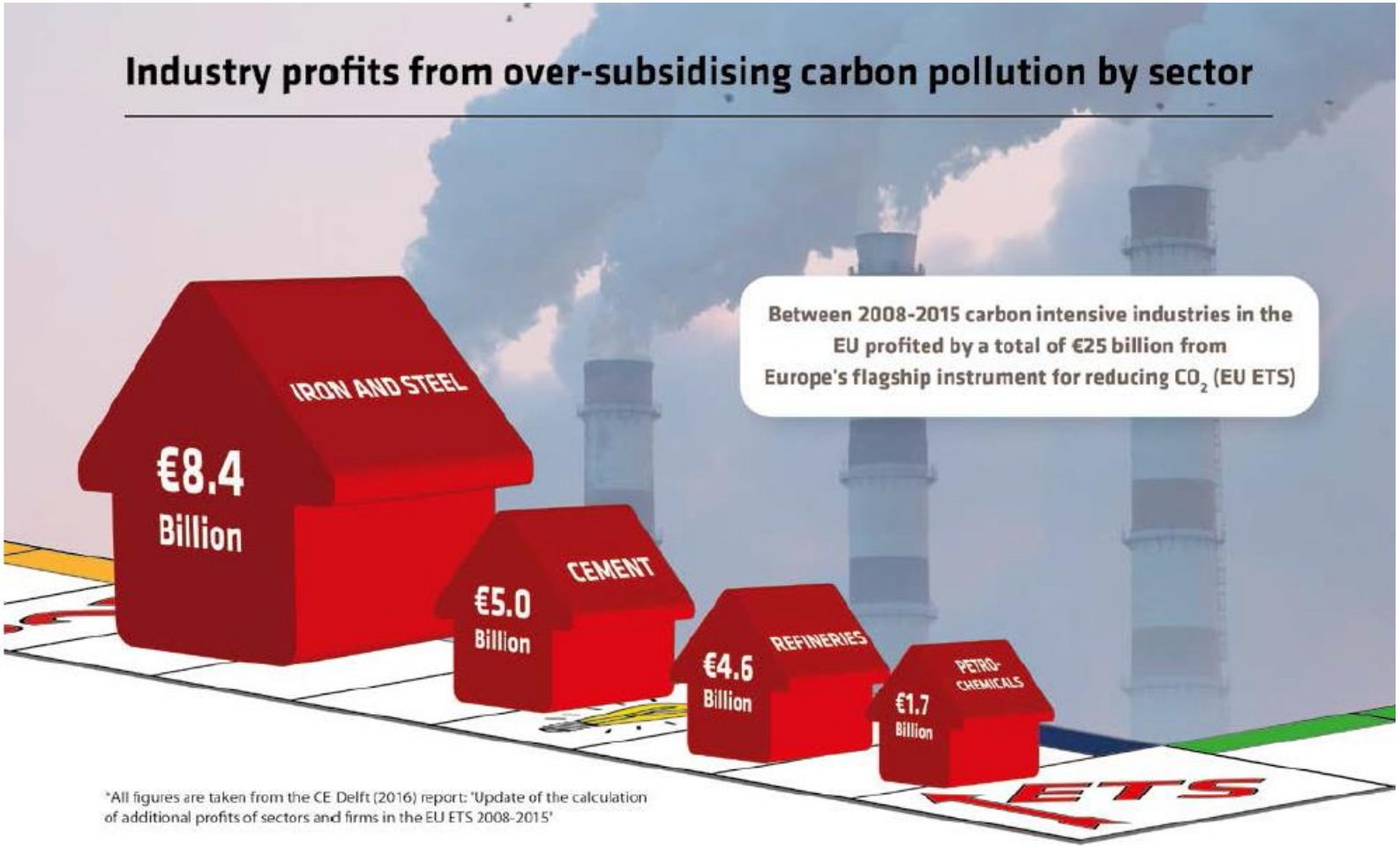
Windfall profits by countries



Windfall profits by sector



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The cement industry made €5 billion windfall profits from the EU ETS

- **€2.7 billion** windfall profits from **surplus**
- **€0.1 billion** windfall profits from **offsets**
- **€2.1 billion** windfall profits from **cost-pass through**

Example: Spain

Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
Cement	**€798 million**	**€17 million**	**€309 million**	**€1,124 million**
Refineries	€133 million	€9 million	€473 million	€616 million
Iron and steel	€250 million	€14 million	€341 million	€605 million
Manufacturing of bricks	€177 million	€2 million	€39 million	€218 million
Petrochemicals	€34 million	€2 million	€54 million	€90 million

Windfall profits by sector in Spain 2008-2015

Company	Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
ArcelorMittal	Iron and steel	€224 million	€13 million	€270 million	€507 million
Cemex	**Cement**	**€273 million**	**€3 million**	**€63 million**	**€340 million**
Portland Valderrivas	**Cement**	**€125 million**	**€2 million**	**€43 million**	**€170 million**
Lafarge	**Cement**	**€94 million**	**€4 million**	**€32 million**	**€129 million**
Holcim	**Cement**	**€85 million**	**€0.07 million**	**€34 million**	**€118 million**

Windfall profits by company in Spain 2008-2015

Example: Italy

Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
Cement	**€516 million**	**€22 million**	**€357 million**	**€895 million**
Iron and steel	€8 million	€13 million	€596 million	€617 million
Refineries	-€428 million	€10 million	€752 million	€333 million
Petrochemicals	€126 million	€1 million	€74 million	€202 million

Windfall profits by sector in Italy 2008-2015

Company	Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
ILVA	Iron and steel	€50 million	€6 million	€420 million	€476 million
Italcementi	**Cement**	**€132 million**	**€6 million**	**€96 million**	**€234 million**
Buzzi	**Cement**	**€116 million**	**€4 million**	**€64 million**	**€184 million**
Versalis	Petrochemicals	€92 million	-	€61 million	€153 million
Colacem	**Cement**	**€79 million**	**€4 million**	**€62 million**	**€145 million**

Windfall profits by company in Italy 2008-2015

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Example: Ireland

Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
Cement	**€124 million**	**€1 million**	**€40 million**	**€165 million**
Refineries	€3 million	€0.03 million	€11 million	€15 million
Lime	€10 million	€0.08 million	-	€10 million

Windfall profits by sector in Ireland 2008-2015

Company	Sector	Windfall profits from surplus	Windfall profits from offsets	Windfall profits from min. cost-pass through	Total windfall profits
CRH	**Cement**	**€90 million**	**-**	**€22 million**	**€112 million**
Quinn	**Cement**	**€23 million**	**€1 million**	**€12 million**	**€36 million**
Lagan	**Cement**	**€10 million**	**-**	**€6 million**	**€17 million**

Windfall profits by company in Ireland 2008-2015

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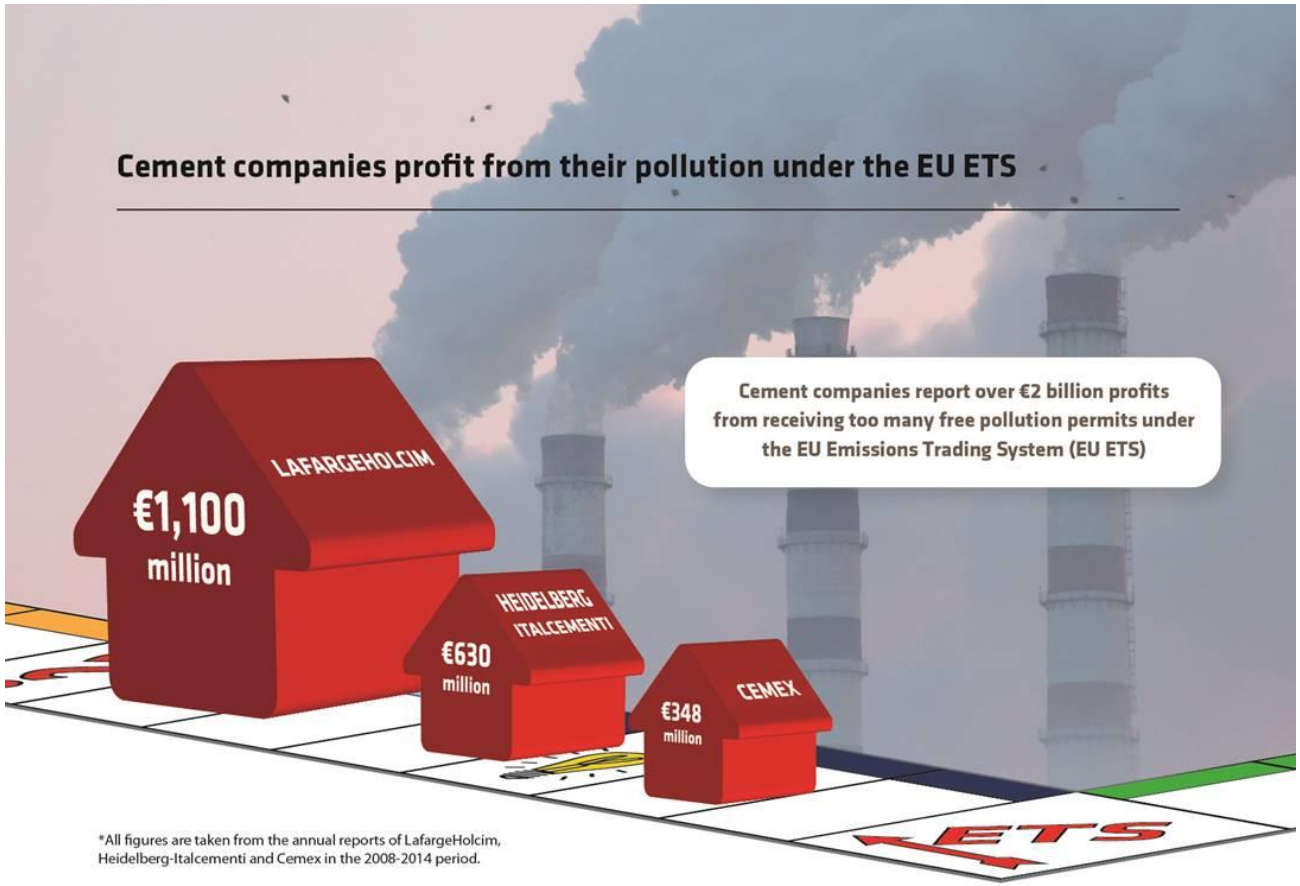
Cement industry confirms profits made from the EU ETS



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EU ETS has failed to promote cement decarbonization

because…

1. **The current carbon price is too low to incentivize investments**
2. **Companies have been able to benefit from their pollution rather than making them pay**
3. **EU ETS promotes high cement emissions by incentivizing the use of a high-carbon input (clinker), rather than encouraging low-carbon alternatives**

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Europe has fallen behind in efficient cement production

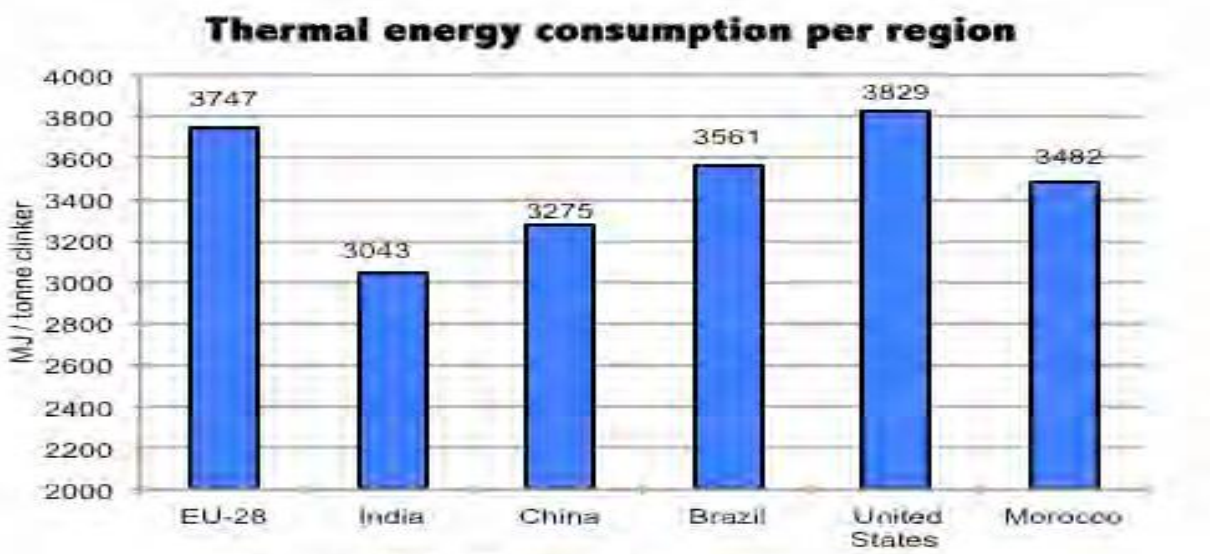

Figure 3.4. Thermal energy consumption per region for grey clinker production. [MJ/t clinker.] Source: World Business Council for Sustainable Development (2015).

*taken from: Institute for European Studies, IES (2016), *The Final Frontier - Decarbonising Europe's energy intensive industries*

A forward-looking cement sector

…achieves emission reductions by

- **Phasing out** of older and inefficient production sites and **modernization** of plants
- **Substituting** high-carbon clinker to reduce process emissions (e.g. granulated blast furnace slag, fly ash material, even limestone itself)
- **Investing** in process innovations, such as calcium looping CCS technology which could capture more than 80% of the cement production emissions
- **Downstreaming demand reductions** that reduce the amount of concrete or cement that is actually needed.

*IES (2016), *The Final Frontier - Decarbonising Europe's energy intensive industries*

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Making the EU ETS fit for purpose

Key recommendations

- ✓ **Deliver a carbon price that rewards green innovations**
- ✓ **End the free allocation of allowances** to the sector to end profits from overallocation
- ✓ **Introduce benchmarked border levelling in combination with 100% auctioning** since it is the most effective approach to tackle the problem of 'carbon leakage' in the sector
- ✓ **Replace clinker benchmarks with a cement benchmark** to incentivise low-carbon clinker substitutes
- ✓ **Invest more auctioning revenues in climate friendly innovation** and **support frontrunners** that invest in breakthrough technologies

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Thank you!

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