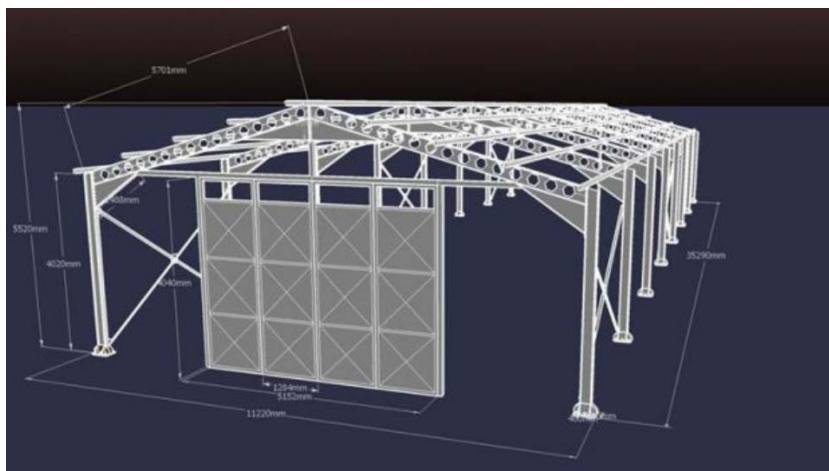


Decommissioned O&G Steel

Re-use in Construction



Purpose of the project



- ▶ Identify potential market-led solutions for the re-use of structural steel from decommissioned North Sea topsides
- ▶ Identify actions that could help stimulate and support market-led solutions

Initial responses

Whaaaattt!!?

Oof!

Could be
tricky!

Challenging
but doable

Good luck!

Where do you
start?

There is
always a way

Eh?!

About time!

Aye right!

No chance.

Been
wondering
about that

Why not?

Sounds
interesting!

Not going to
happen



Pessimism

Optimism

What did we do?

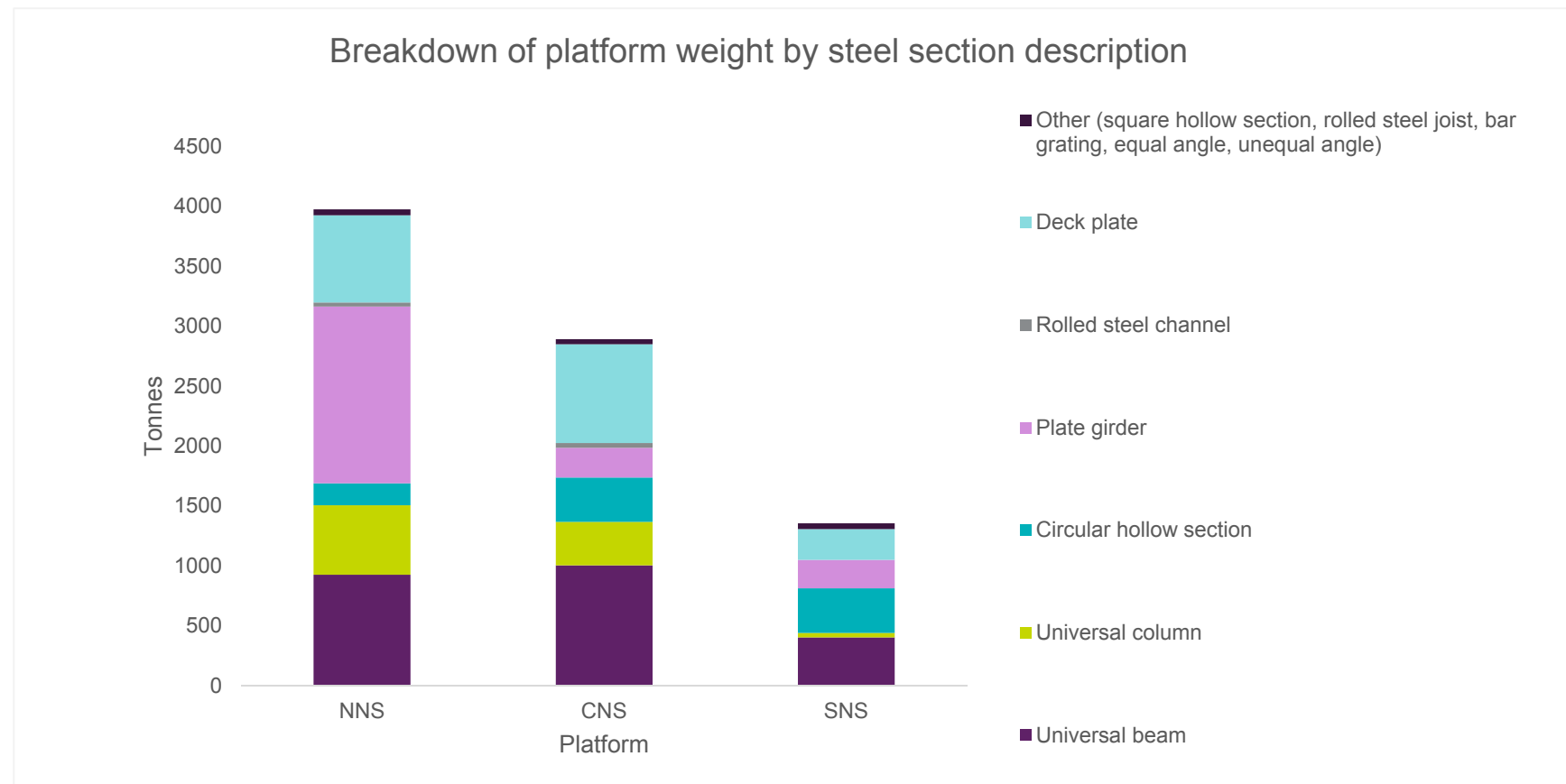
- ▶ Reviewed existing literature
- ▶ Picked 3 x topsides as examples
- ▶ Weight reports and re-use potential
- ▶ Talked with oil and gas industry regarding removal
- ▶ Talked with downstream potential markets
- ▶ Identified potential re-use markets
- ▶ Identified processes to market
- ▶ Identified barriers
- ▶ Solutions and next steps

- ▶ **What actions are needed to open up a market?**

What did we find?

Steel quantities and types

- By weight, universal beams are the most common, followed by deck plates, and plate girders



Re-use “size of the prize”

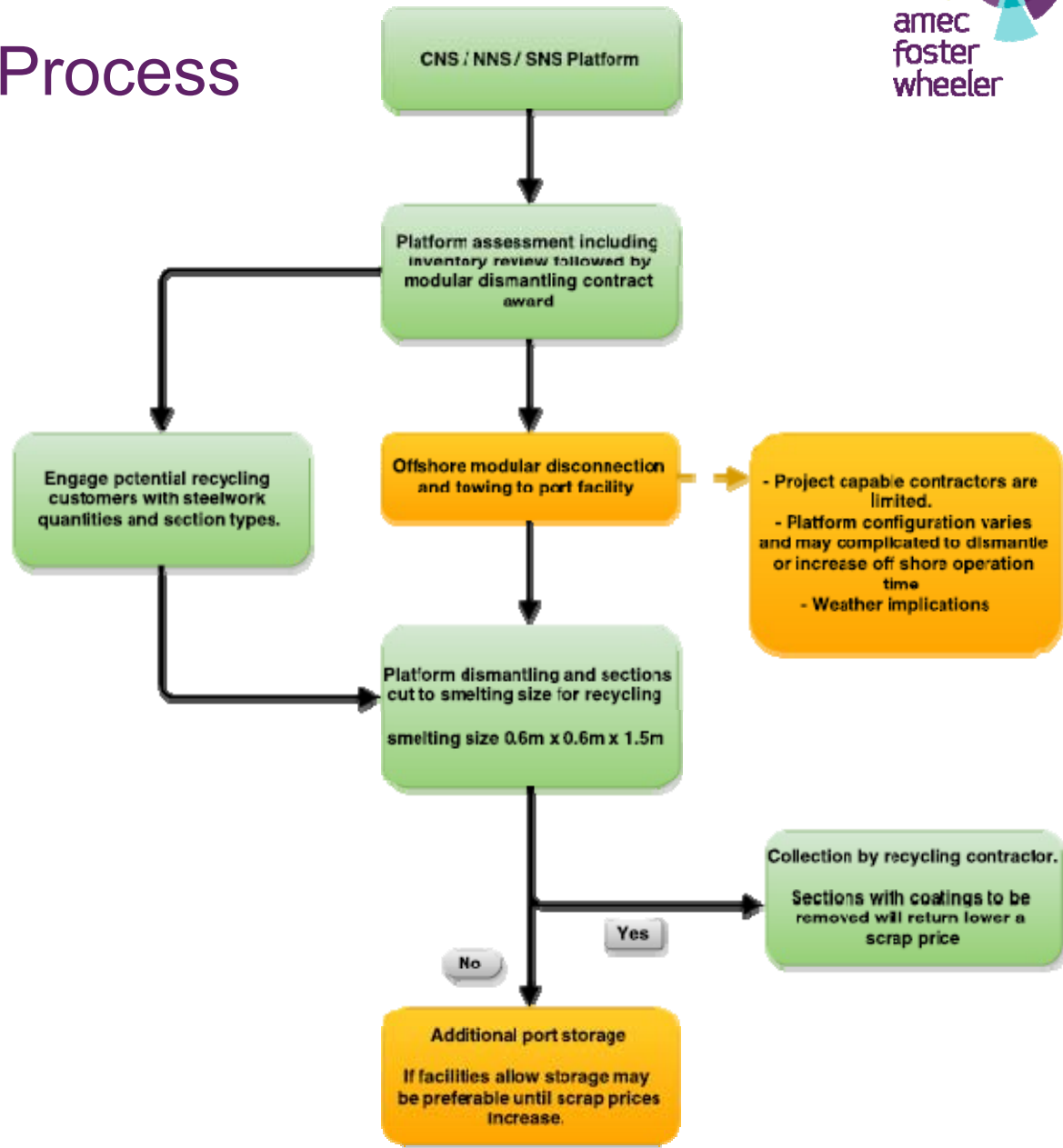
- ▶ Around 5m tonnes of structural steel offshore
- ▶ Current re-use of steel is very low, approx. 1-2% on average
- ▶ Re-use levels of 3-4% would still have a net CO2e impact
- ▶ Re-use levels of approx >60% needed for CO2e savings

Current Recycling Process

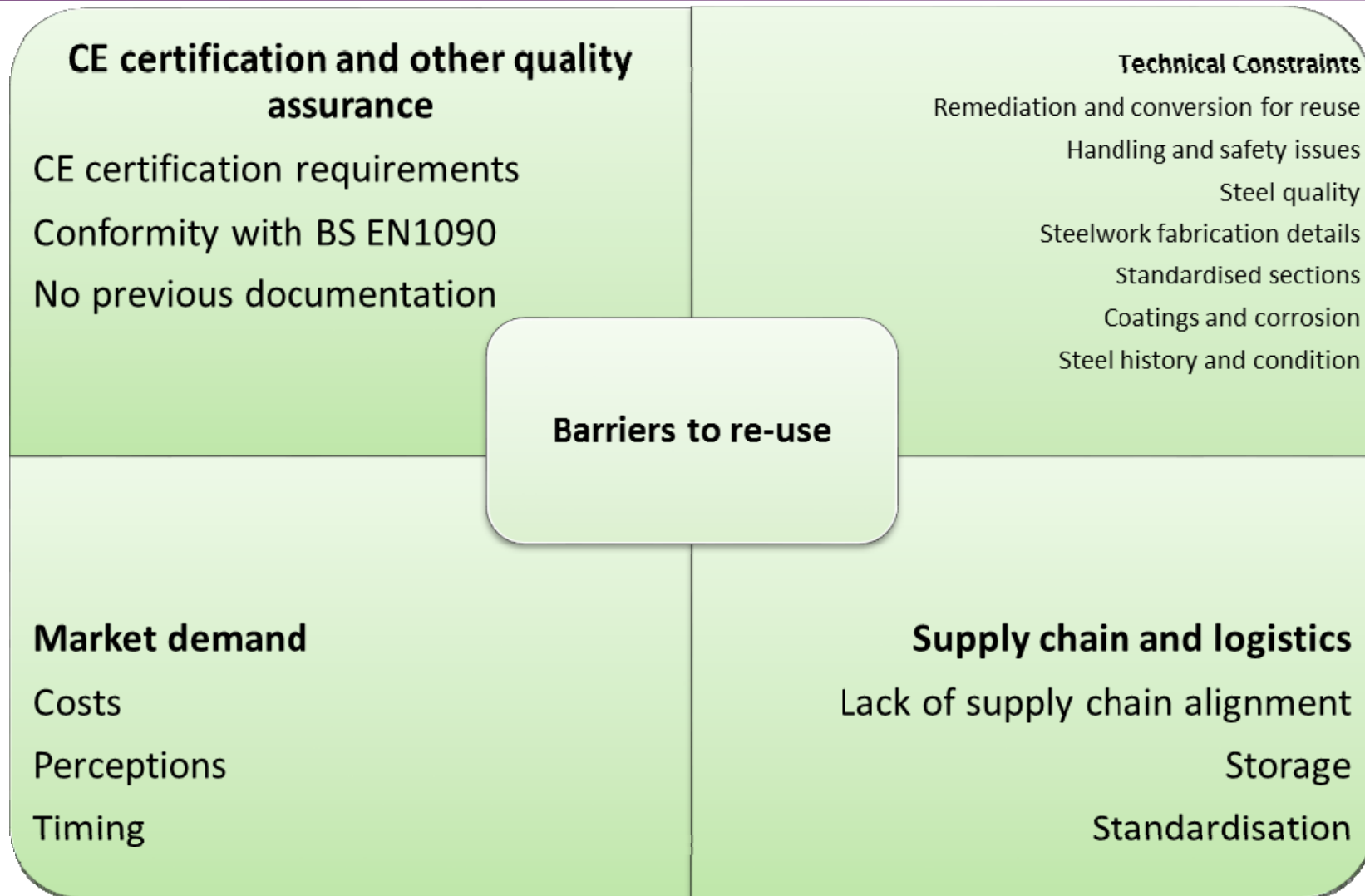
Generally proven and available process

Some questions about availability/feasibility

Known challenges around availability/feasibility



Barriers to re-use



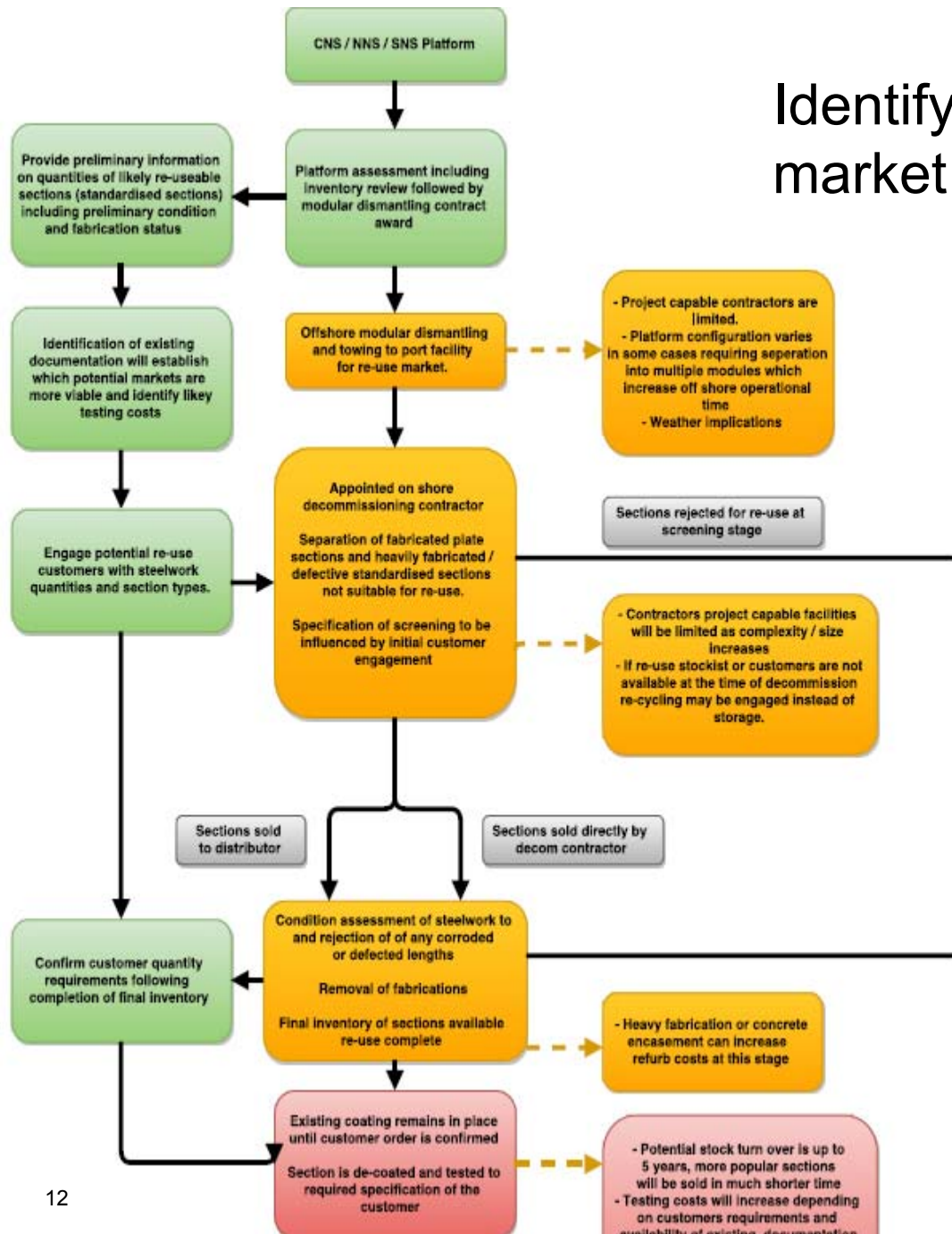
CE marking

Widely considered the #1 barrier to re-use

- ▶ All fabricated structural steel work legally requires Conformité Européene (CE) marking as of the 1st of July 2014.
- ▶ **CE regime currently under review**
- ▶ **How can this barrier be overcome?**

Solutions?

Identify a process to market



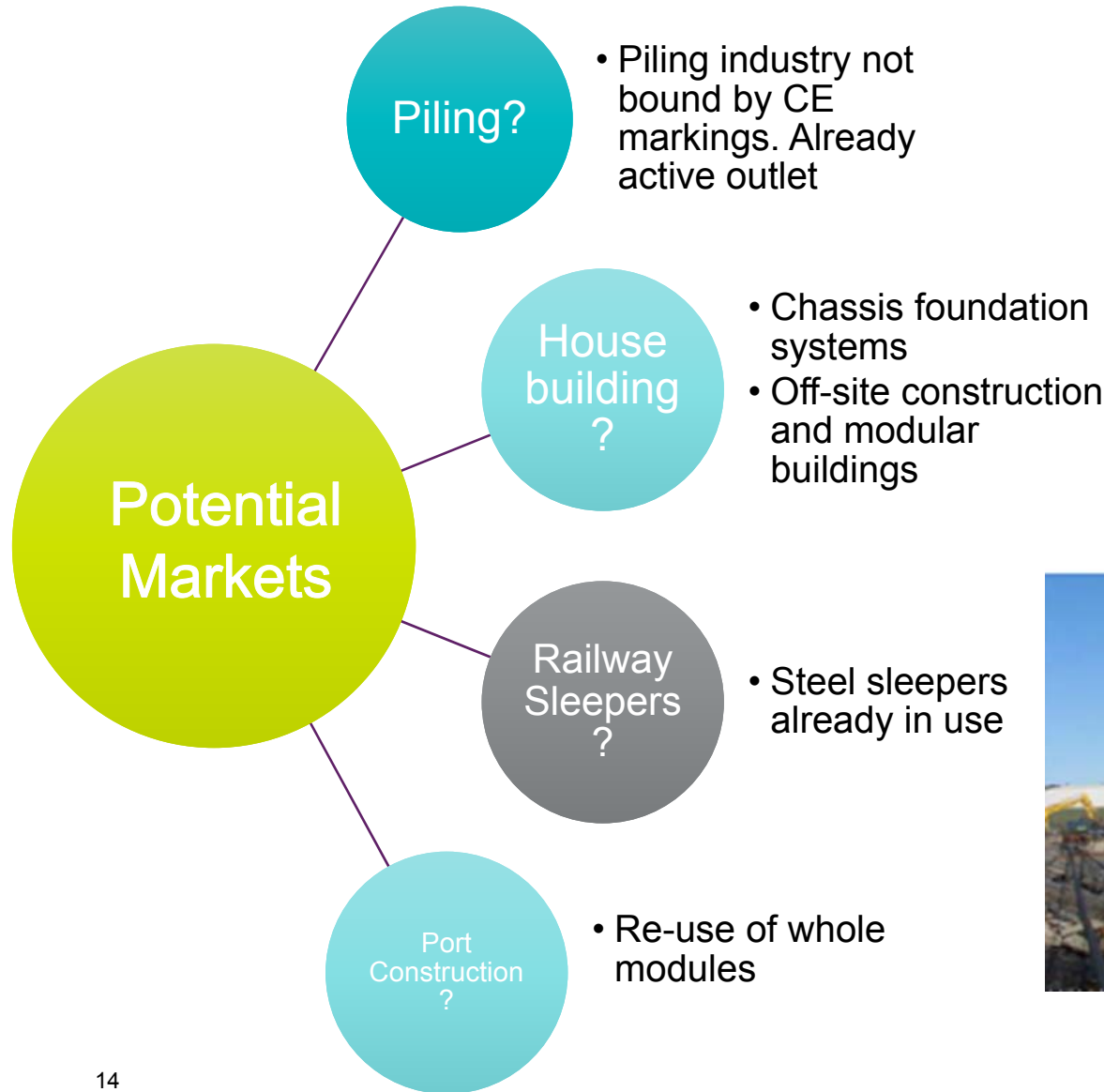
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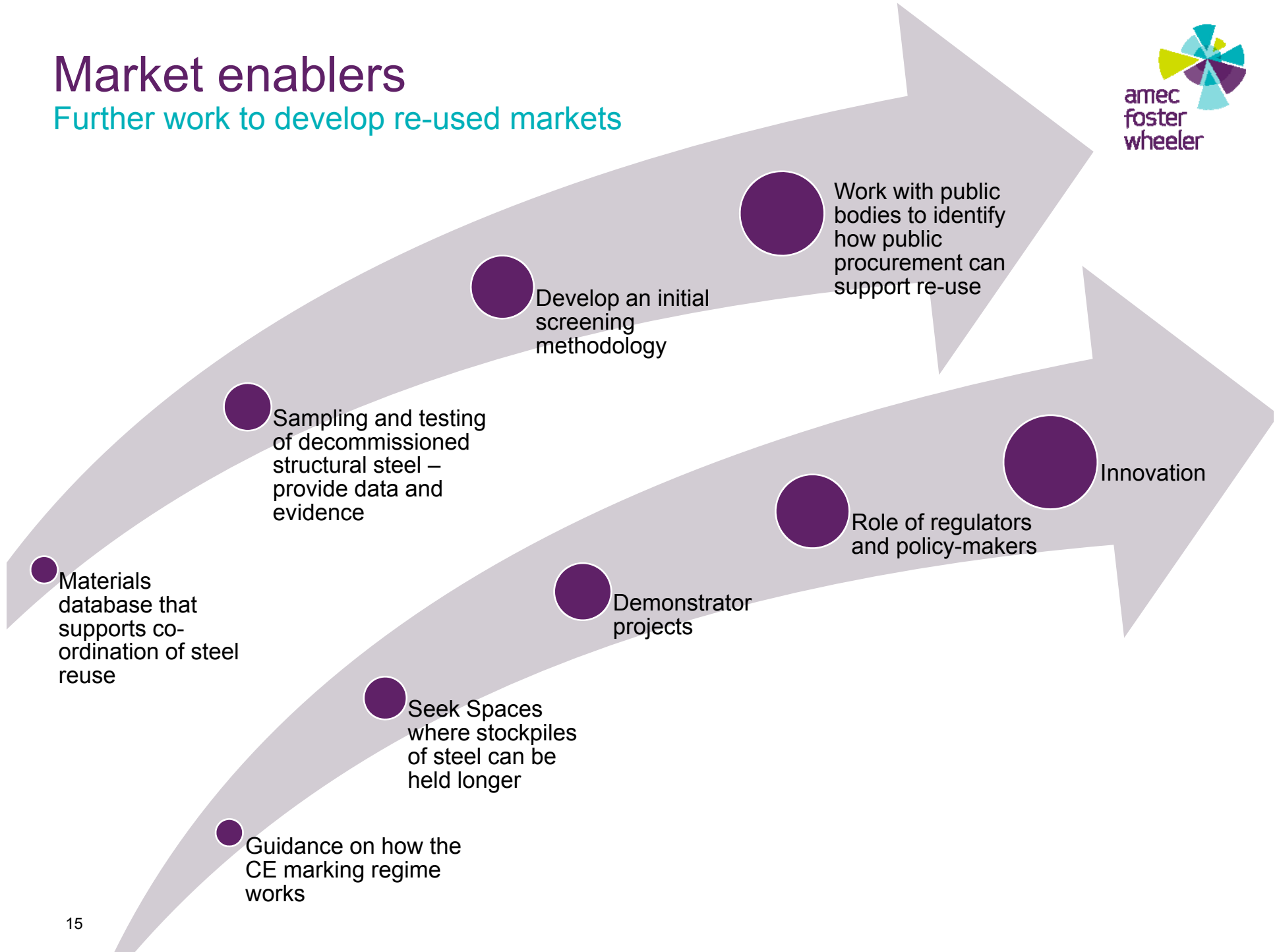


Identify potential outlets



Market enablers

Further work to develop re-used markets



Conclusions

- ▶ Disproportionate focus on O&G sector to drive re-use
- ▶ Needs a joined-up approach
- ▶ Enable and encourage innovation
- ▶ Lots of perceptions and challenges to address
- ▶ **Is all about the market pull**



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