



Session 03: ACTION

16.20 – 18.15

Per Arne Nilsson

15: My personal account

10: Set up Break-out session

50: Team Discussions

40: Report-Out, Discussion,
Documentation of Results

My Personal View is..... We are way off track, not making (enough) progress!



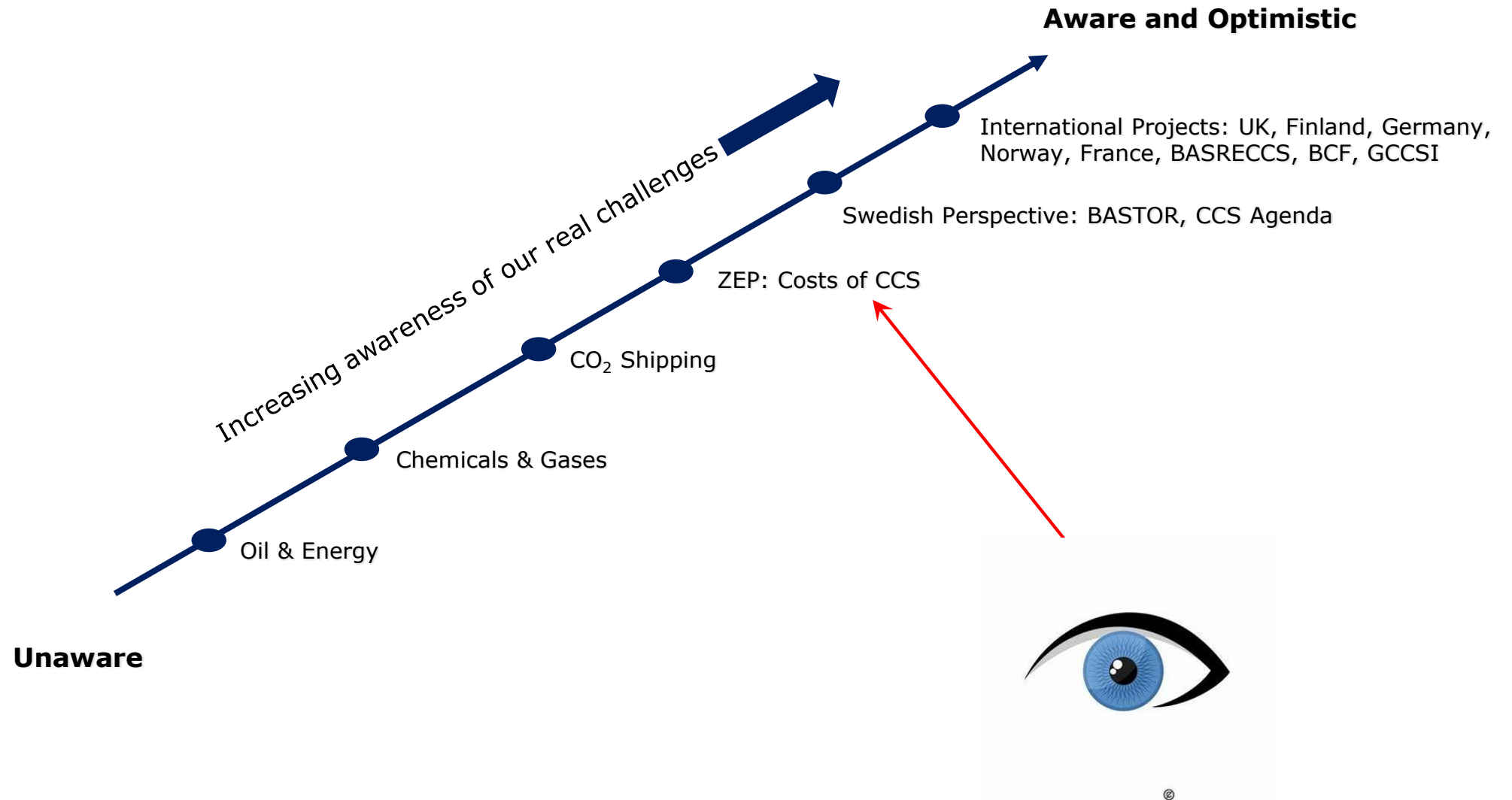
But **Respect and Recognition**,

So many here and elsewhere drive technical, legal, financial and other development, but **Policy Making** and **Deployment** lagging behind, way behind

We must focus on the **Tonnage**, how much new volume have we stored away, the last ten years, really?

And, what is my own **Contribution**?

My Journey

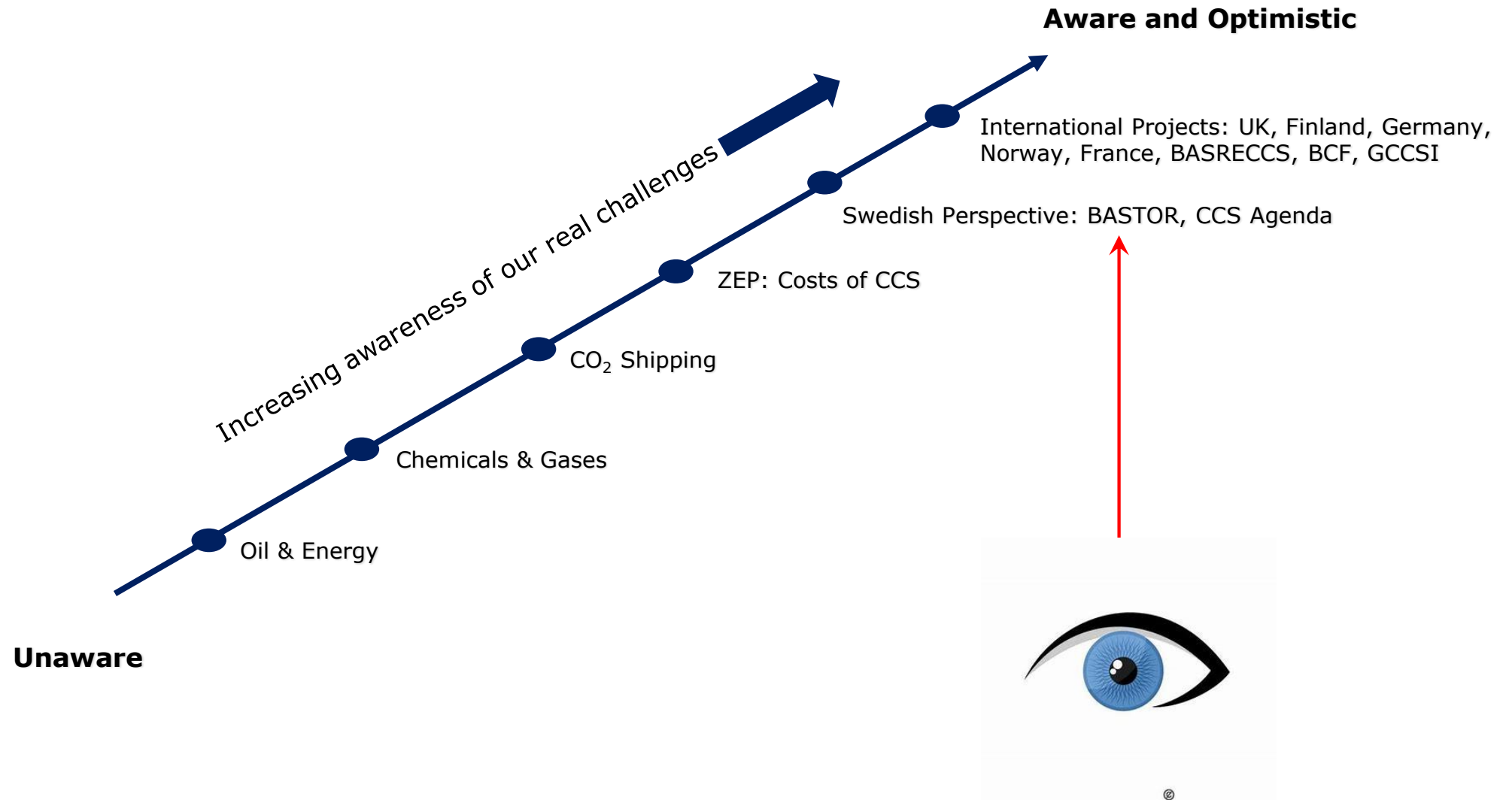



The Costs of CO₂ Capture, Transport and Storage

Post-demonstration CCS in the EU

Form for Zero Emission Fossil Fuel Power Plants

My Journey

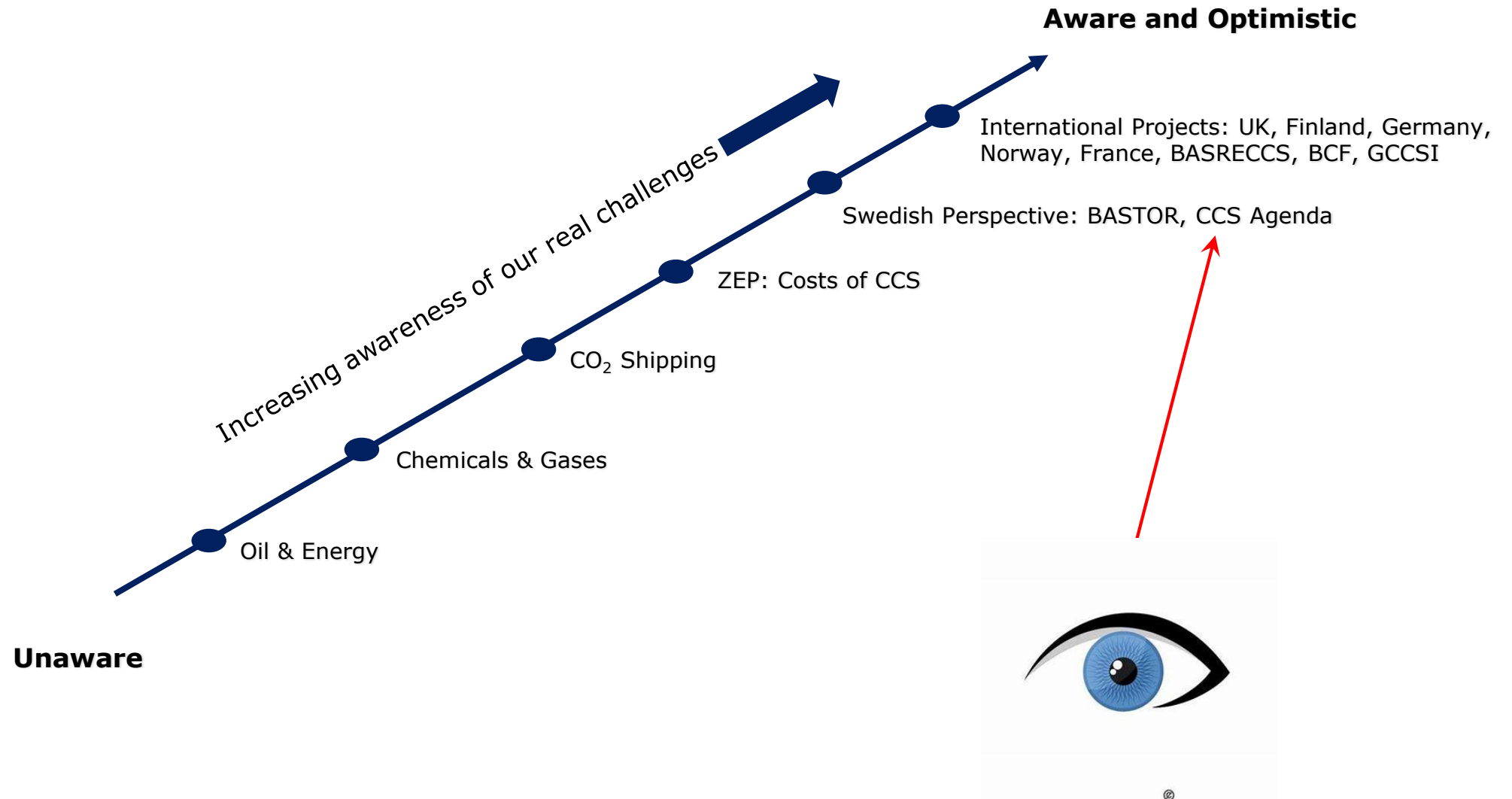


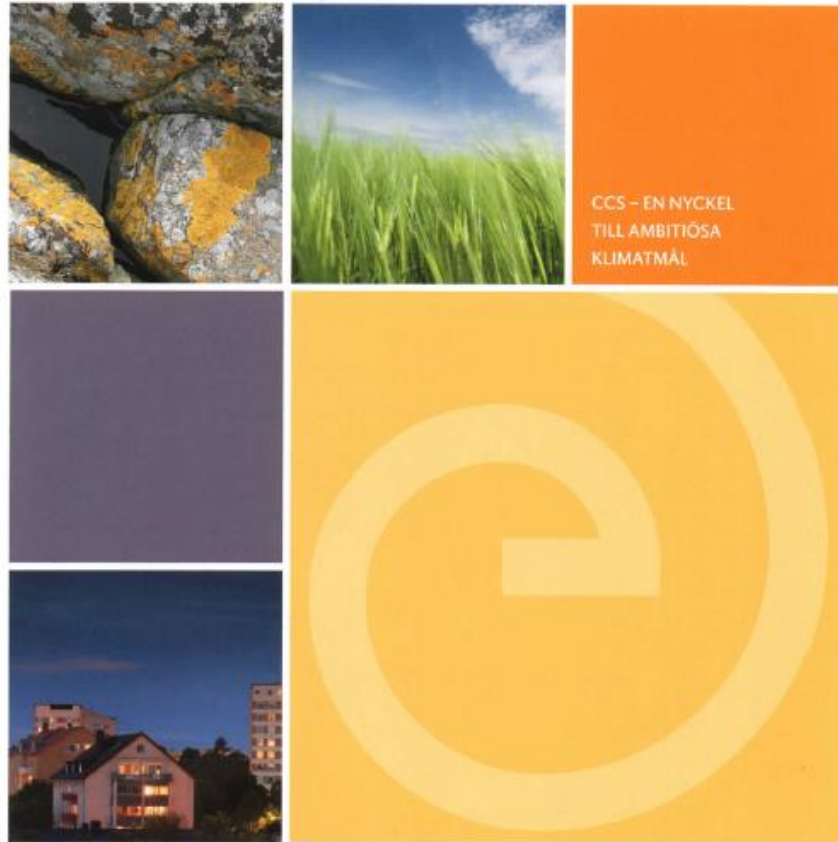


The bedrock under the Baltic Sea

– a possible storage
site for carbon dioxide

My Journey





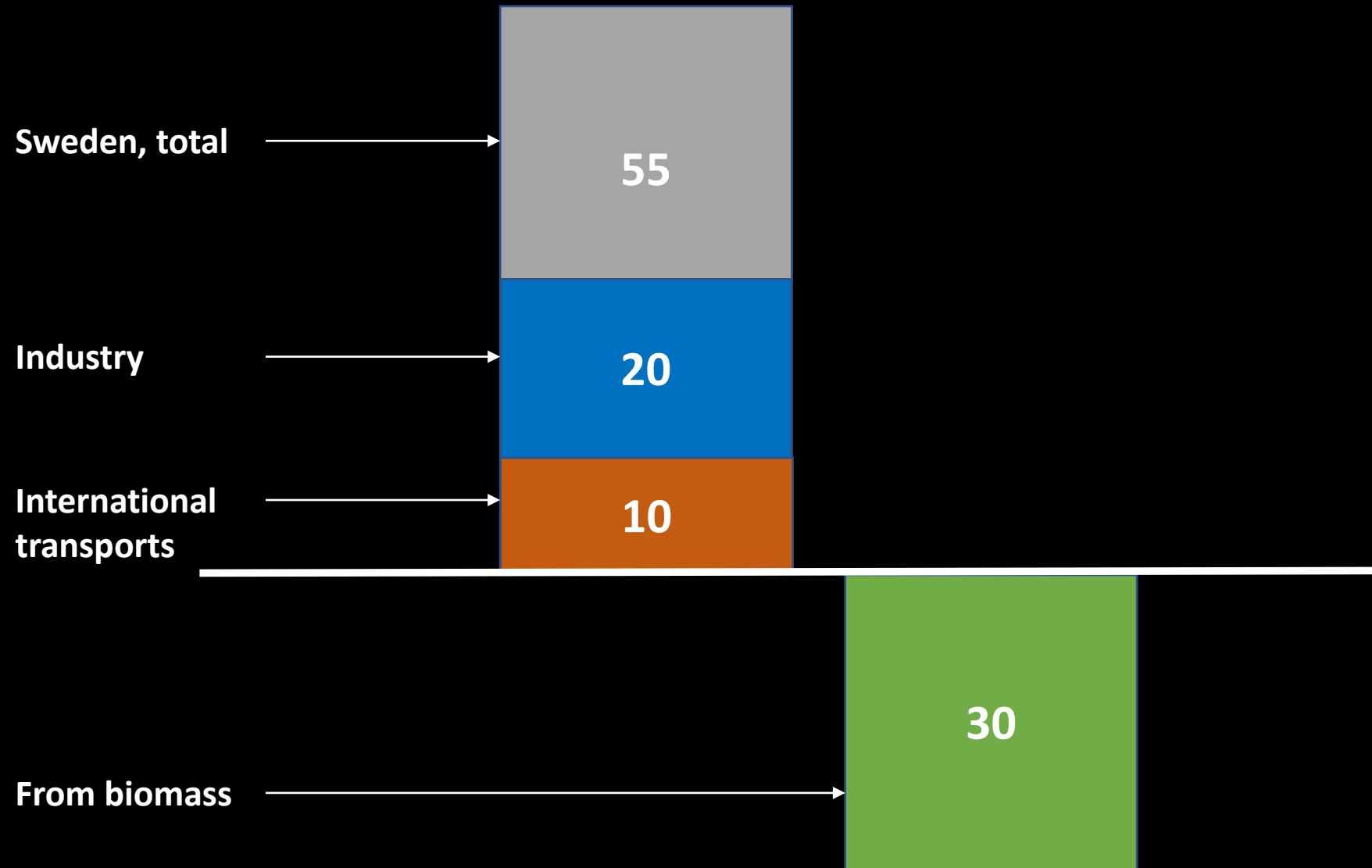
Executive Summary

The Swedish base industry is in the forefront in sustainable manufacturing with a uniquely low level of carbon dioxide emissions. The products hold high quality and generate in their respective applications also higher resource utilization.

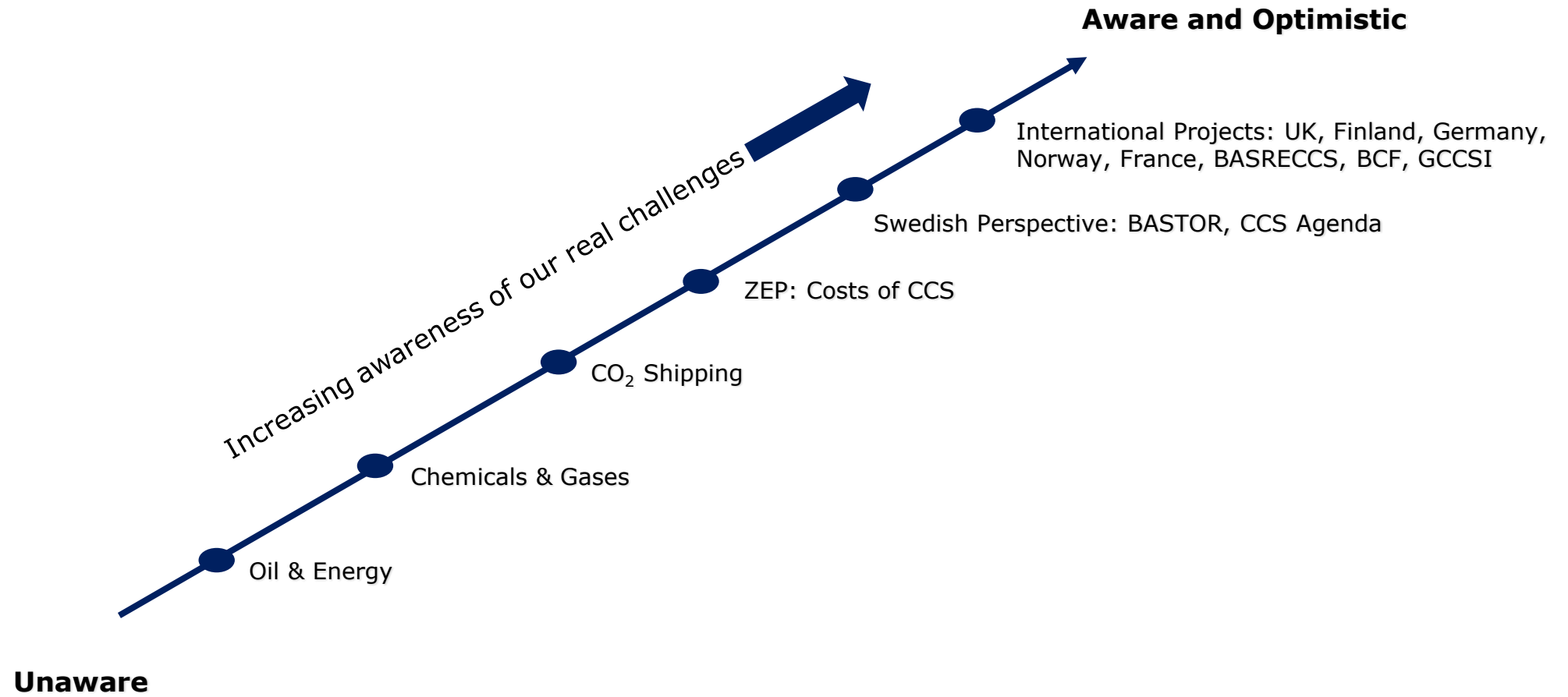
Sweden's total carbon dioxide emissions in 2013 were around 54 million tons. Nearly one quarter of these emanates from the process industry in spite of this having already implemented most of the emission reduction measures available. Therefore the industry needs to be an integrated part of an ambitious Swedish climate mitigation plan, aiming at near zero emissions towards 2050. Although fuel shift and application of new process technologies can further reduce carbon emissions, it is clear that CCS is required if Sweden is to comply with the 2050 climate mitigation targets. Applying CCS will then assist the Swedish industry in taking the lead in sustainable production for a low carbon society by the middle of the century.

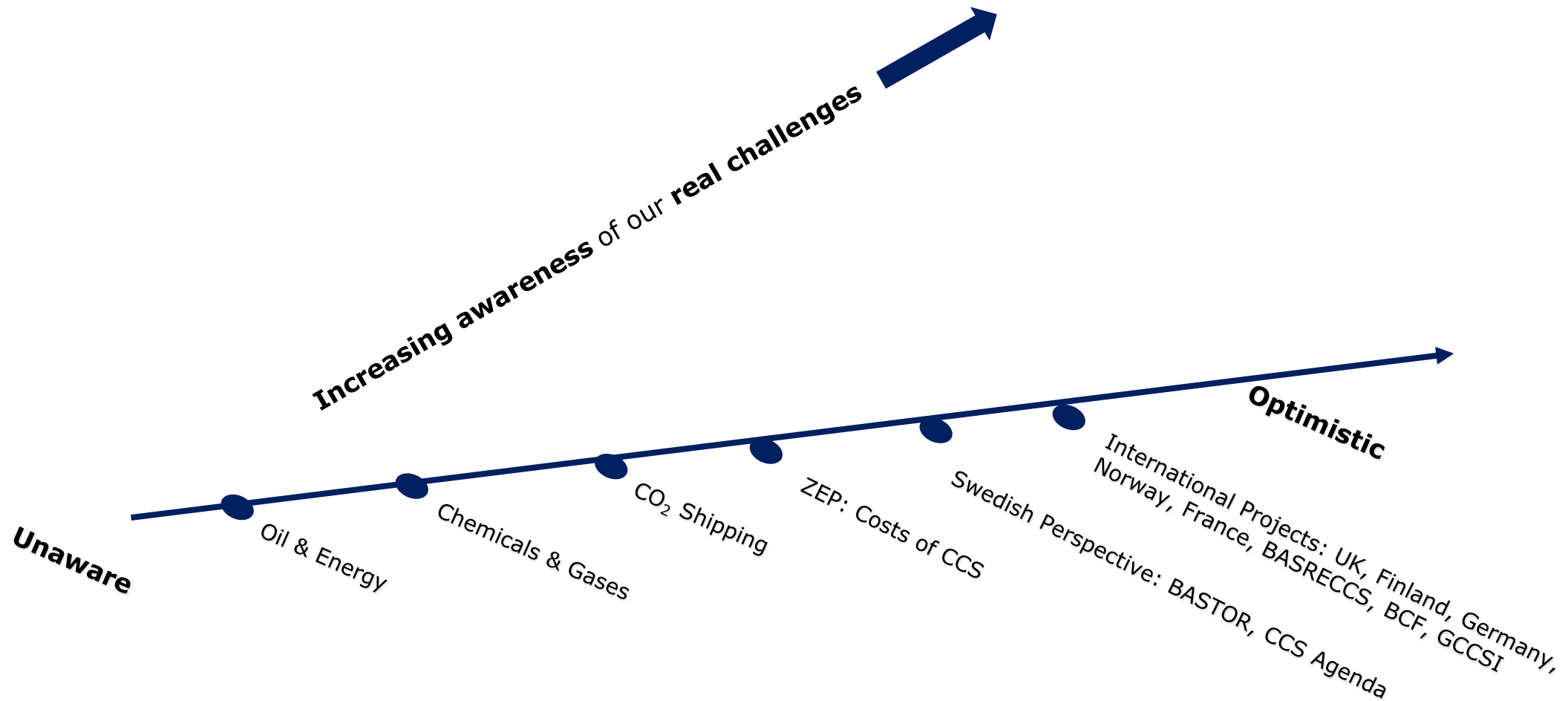
This innovation agenda describes both the background and what it would take for CCS to materialize large scale emission reductions in Sweden before 2050. The main conclusions are that Sweden without delay should give priority to

1. Elaborating a national strategy for CCS.
2. Investigating the conditions and prerequisites for a large scale CCS demonstration project, latest by 2025.
3. Creating a comprehensive and coordinated R&D program for the process industry and CCS for the period 2016-2020, to respond to the critical questions for the implementation of large scale CCS in Sweden.



My Journey





**Så mycket kommer
havsnivåerna stiga**

Som mest: 5,3 m

Maxprognos med fortsatt
högt utsläpp av koldioxid
(RCP8.5),
över
dagens nivåer
år 2300

Som minst: 0,6 m

Minimumprognos om koldi-
oxidutsläppen kulminerar
omkring år 2020 (RCP2.6),
över
dagens nivåer
år 2300



Helheimglaciären på sydöstra Grönland
i augusti 2019. Amerikanska forskare
installerar mätinstrument för att kartlägga
avsmältningen av isarna i Arktis som är en
av anledningarna till stigande havsnivåer.

**New UN Climate
Alert:**

**World Sea Levels
Rising Faster Than
Earlier Thought
Possible**

→ Klimathotet | SvD.se

Källor: IPCC. Foto: AP/Felipe Dana. Grafik: Thomas Molén

FN:s nya klimatlarm: Havsnivån stiger snabbare än tidigare trott

But there is room for some optimism, as well....

There is Hope for the Climate

(C:) Negative carbon dioxide emissions should be rewarded

Clean, Swedish Steel presented as a Role Model at UN Climate Summit



While on this Optimistic note....

How quickly can enough incentives be put in place for emitters to dare take the first step?

How can the financing institutions make themselves relevant, for both industry and the political circles?

How can financing packages be construed to give enough comfort to decision makers?


BASRECCS' goal is to contribute to one full scale commercial CCUS project in the region, in operation by 2030

Honestly,

How keen are YOU on making a **difference**, having real **impact**?

You want to try a **Live Experiment** of Baltic Sea Region
Collaboration?

This is of course voluntary. Please opt out now if you wish to not participate.



Good Luck and
Have Fun!

Handout – Questions/Instructions

3 A The Questions: Two different sets of questions, hand-outs

- 1 Which are the **three most urgent actions** to take – and by whom, for the Baltic Sea Region to have one full (commercial) scale CCUS installation in operation by 2030?
- 2 Which are the most important ways for **BASRECCS** to support in these actions?
- 3 How could the **Baltic Carbon Forum** become more instrumental in CCUS deployment in the Baltic Sea Region?
- 4 Discuss how **Your Team** will bring forward and make useful, the connect you have made during this session?

If time allows, discuss, but no need to report back: Beyond your current job, how do you, individually want to support BASRECCS in reaching its goal? Who do you want to recruit to the BASRECCS network?

4 Report-out: Document your answers for questions 1-4, in Powerpoint, plain text, one slide per question. Present to a larger forum, using no more than 6-7 minutes. Discuss with the other teams.

Post session, provide Peter Molander with your team's answers, by mail or USB.

Handout – Questions/Instructions

3 B The Questions: Two different sets of questions, hand-outs

- 1 Which are the most likely **candidate (CCUS) projects** for deployment in the Baltic Sea Region? Make a ranking!
- 2 Discuss the **biggest challenges** to overcome, for one or two of those (above) to have some progress!
- 3 How should **BASRECCS** best **be organized** to support and facilitate deployment/progress?
- 4 Discuss how **Your Team** will bring forward and make useful, the connect you have made during this session?

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