



Rijkswaterstaat
*Ministry of Infrastructure and the
Environment*

The CO₂-Performance Ladder in sustainable public procurement

Annual meeting EUDA, 15th
November 2016

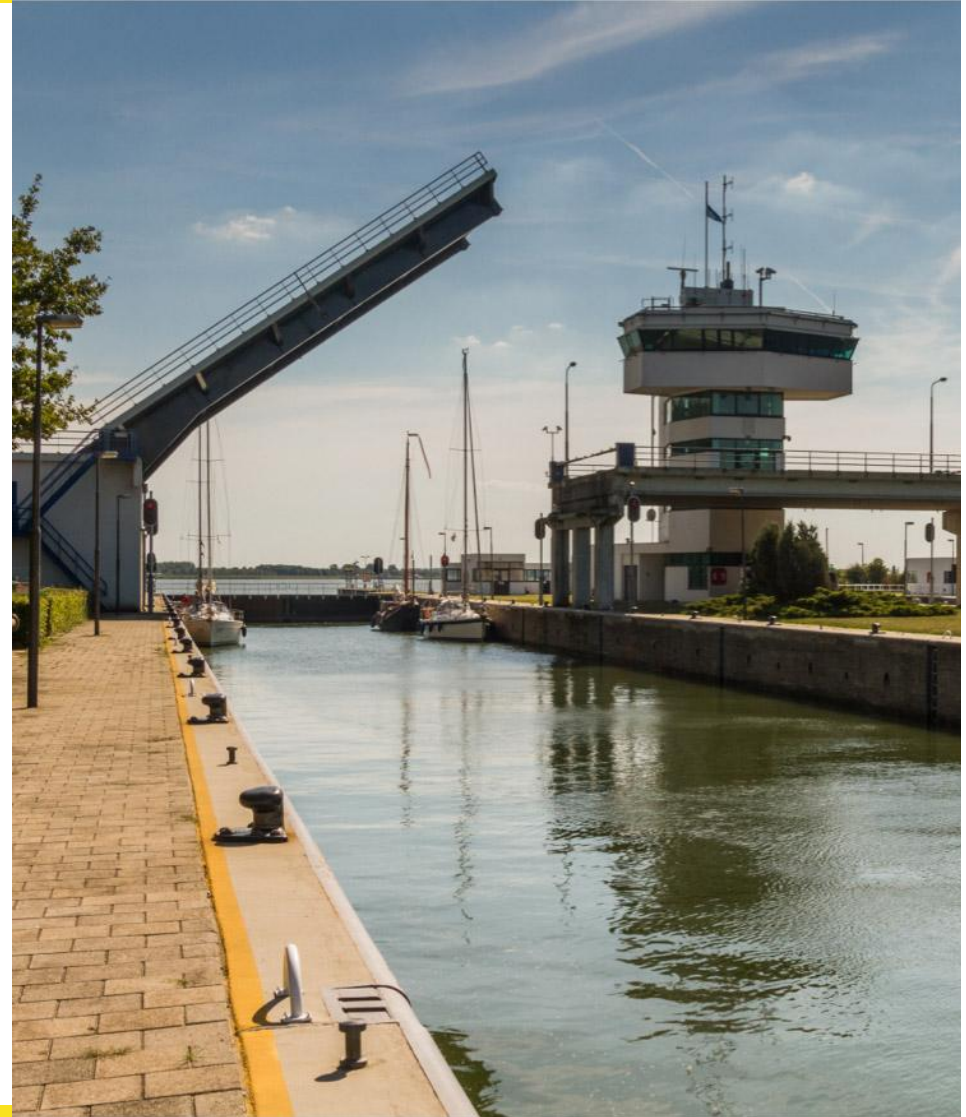
Drs. Harry Zondag



Presentation

Sustainability:

- the Rijkswaterstaat approach
- The CO₂-Performance Ladder
- Explanation
- Experiences
- Future

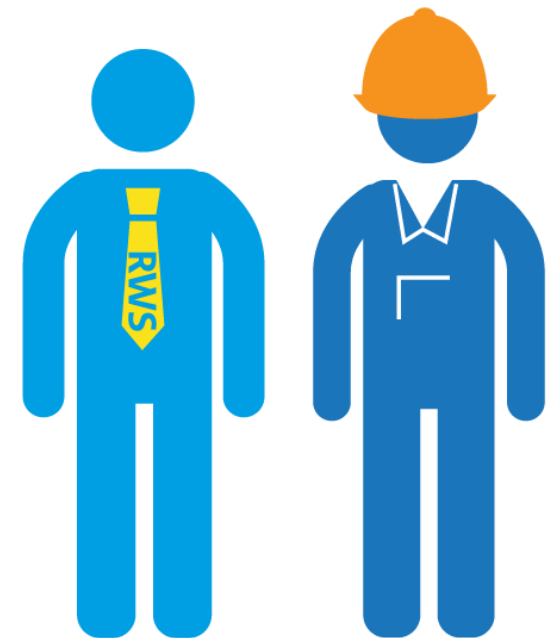


Rijkswaterstaat
CO2 Performance Ladder for RWS



The Rijkswaterstaat approach

- Short term goal: reduce CO₂-emission by 20% in 2020 (compared to 2009)
- Improving our energy efficiency
- Sustainable procurement in our public works
 - Functional specifications
 - Most Economically Advantageous Tender (MEAT) with sustainability as quality aspect
 - DuBoCalc (sustainable building calculator)
 - CO₂-Performance Ladder

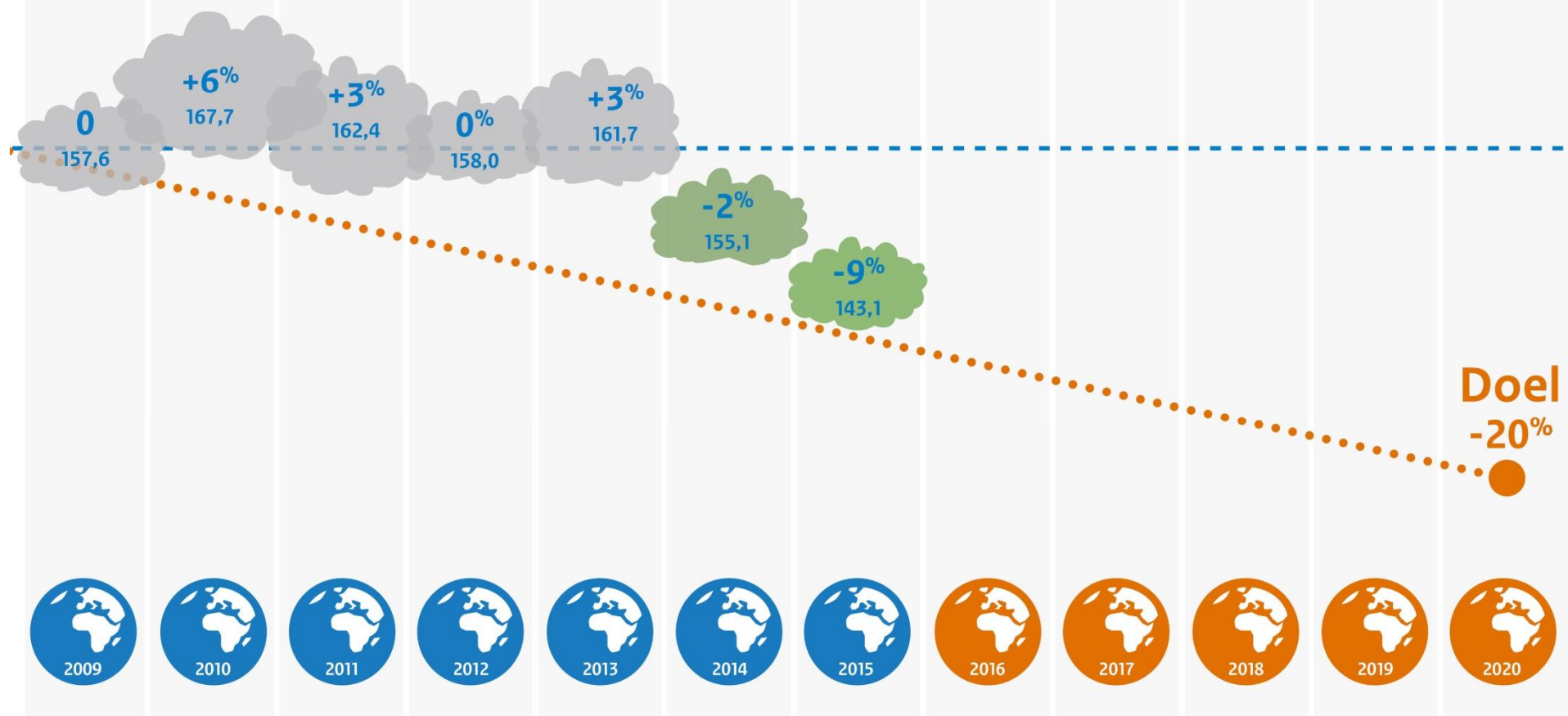




CO₂-emissie 2015 ten opzichte van nulmeting 2009 op basis van CO₂-prestatieladder

In kiloton CO₂-uitstoot en in %

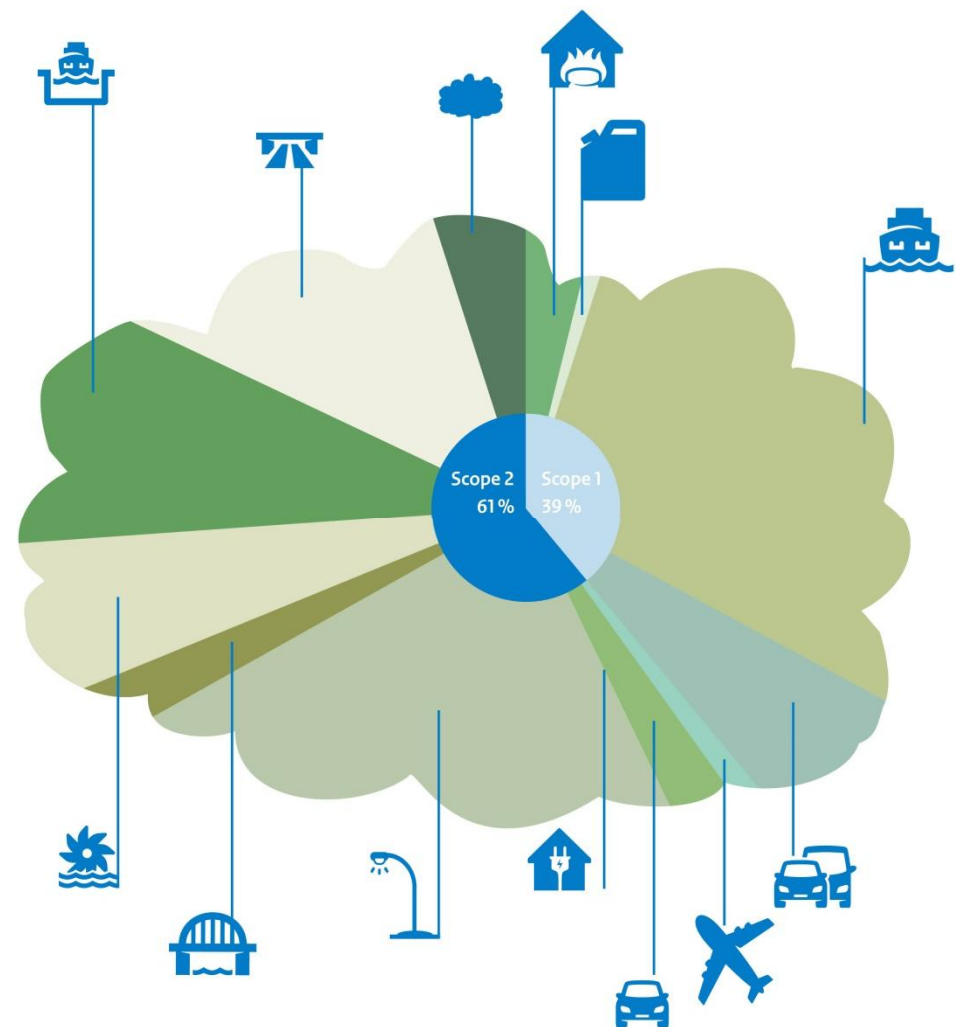
CO₂ –emissions: facilities and network RWS





Think of.....

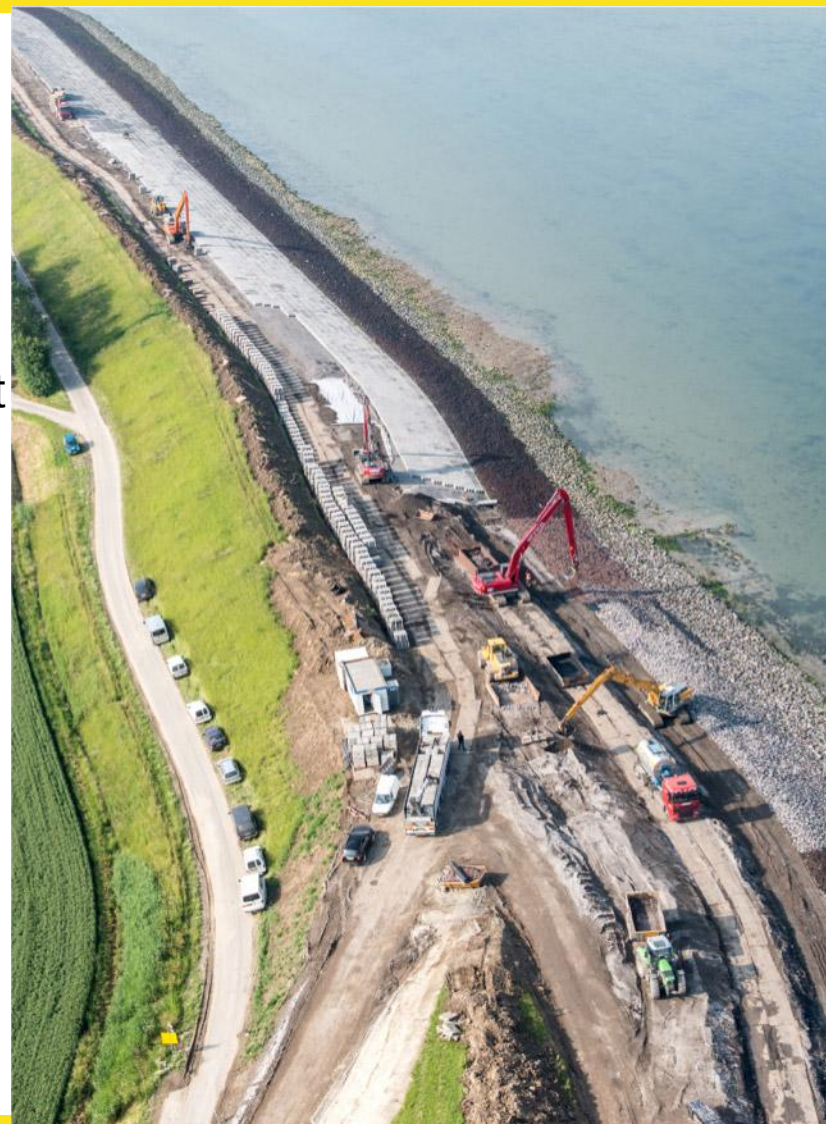
- Public lighting (highways)
- Locks, bridges, flood-defences
- Our fleet, vehicles, traveling





Construction & maintenance

- Rijkswaterstaat spends about
€ 4.000.000.000,- /year
- All done by suppliers, so procurement
is very important
- To compare:
Facilities and use of network in
2015: 143 kiloton CO2
Construction and maintenance in
2015: 1.122 kiloton CO2
- Next slide: carbon footprints different
types of construction and
maintenance in 2015.





CO₂-uitstoot materiaalstromen per categorie, niet gecorrigeerd voor onzekerheidsmarge*

In kiloton CO₂



Droog grondverzet en zand

425



Ruimte voor de rivier

74



Zout vaargeulonderhoud

8



Asfalt

250



Staalconstructies

48



Zoet vaargeulonderhoud

5



Kustsuppletie

185



Waterbouwsteen

20



Betonconstructies

89



Wegfundering

18



Totaal

1.122

kton CO₂

* Onzekerheidsmarge per categorie: kustsuppletie (5%); zoet & zout vaargeulonderhoud, asfalt en wegfundering (20%); droog grondverzet en zand, beton- en staalconstructies (50%); ruimte voor de rivier en waterbouwsteen (onbekend).



Dredging is
very relevant
for our Carbon
footprint

CO₂-uitsluit materiaalstromen per categorie, niet gecorrigeerd voor onzekerheidsmarge*



* Onzekerheidsmarge per categorie: kustsuppletie (5%); zoet & zout vaargeulonderhoud, asfalt en wegfundering (20%); droog grondverzet en zand, beton- en staalconstructies (50%); ruimte voor de rivier en waterbouwsteen (onbekend).

Rijkswaterstaat

CO₂ Performance Ladder for RWS



The CO₂ Performance Ladder

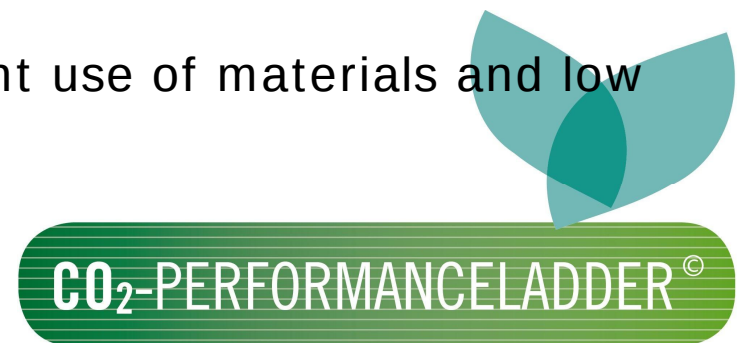
- Property of The Foundation for Climate-Friendly Procurement and Business (SKAO).
- In SKAO: Public-, Private- and NGO's cooperate
- An accredited CO₂ management system/standard (under ISO 17021)
- Continuous Improvement (PDCA-cycle)
- audit checklist with requirements
- Partially based on and makes use of international standards and methods like ISO 14064, ISO 50001, Capability Maturity Model and the GHG-Protocol
- Annually checked by accredited Certifying organisations





The CO₂ Performance Ladder

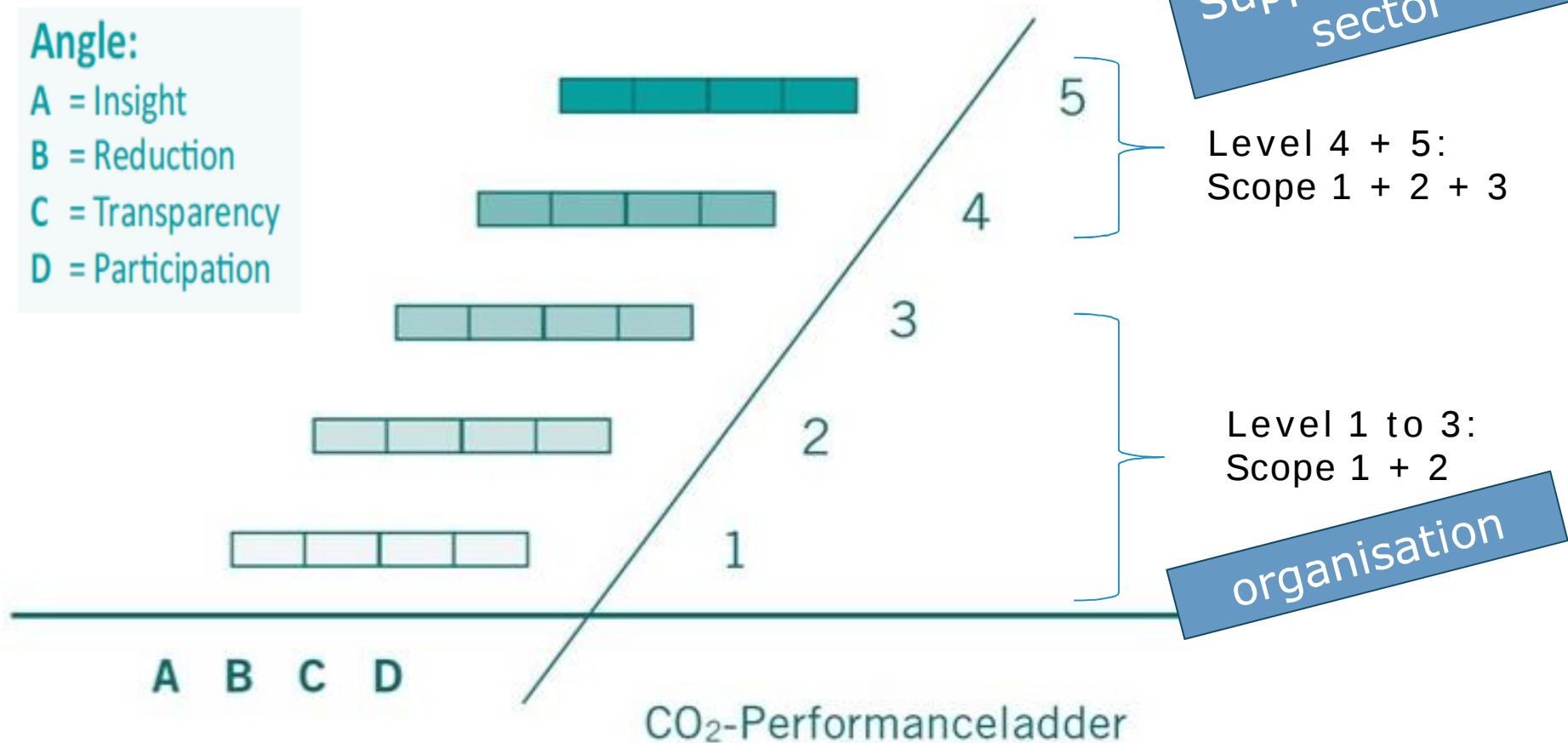
- A procurement tool to encourage companies who participate in tenders to stimulate their CO₂ awareness in their business operations and projects.
- The principle: effort is rewarded:
a higher score on the ladder means a concrete advantage in the tendering process, in the form of a fictitious discount on the tender price.
- It focuses on energy savings, the efficient use of materials and low carbon materials and renewable energy.





CO₂-PERFORMANCE LADDER[®]

CO₂ Performance Ladder for companies



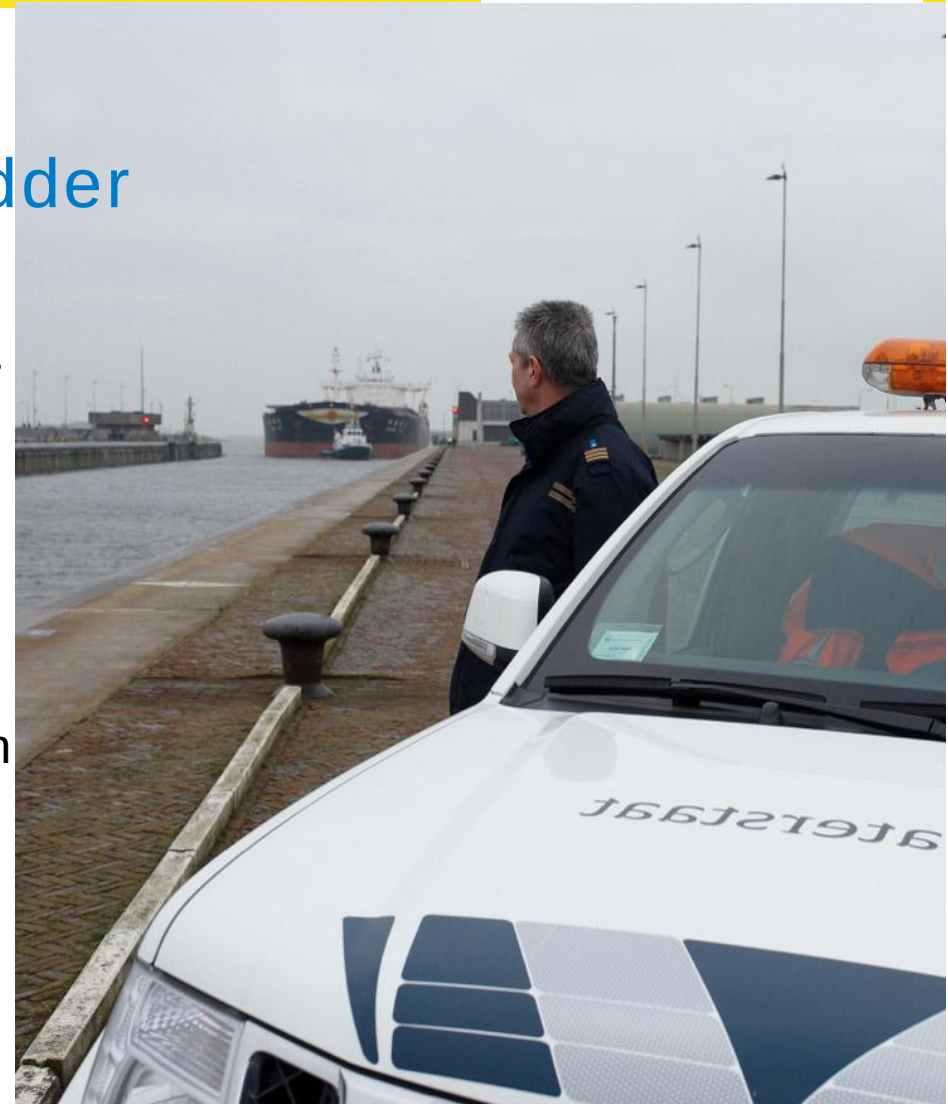


CO₂-PERFORMANCELADDER®

Rijkswaterstaat and CO₂ Performance Ladder

- Standard quality aspect in tendering
- Higher ambition level? => higher fictitious discount on the tender price:

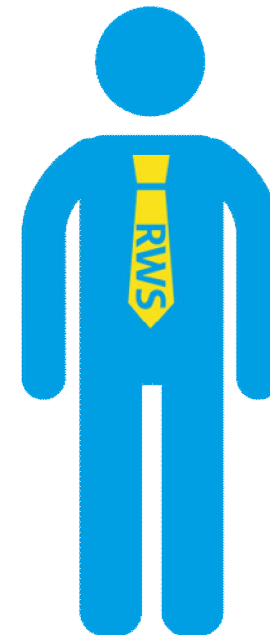
Level 5:	5%
– Level 4:	4%
– Level 3:	3%
– Level 2:	2%
– Level 1:	1%
- In version 3.0: ambition level can be proved
 - by a certificate or
 - By a plan + a Certifying Organisation





Experiences

- Most of our large bidders perform at highest level (level 5)
- Annual CO₂ reduction within 25 large companies is 3,2% (2010-2013)
- Of which approximately 30-50% is attributed to the CO2 Performance Ladder
- (source: Improving energy and carbon management in construction and civil engineering companies – Evaluating the impacts of the CO2 Performance Ladder, M. Rietbergen et al, Utrecht University, Journal for Energy Efficiency, 2016)





Actual situation



- 700 certified companies
- Some companies:
 - high ambition, difficult to perform
- Acceptance of the instrument seems to decrease in dredging market (administrative costs and too little distinctive character)
- RWS started an evaluation of the instrument in hydraulic engineering sector (together with SKAO and Vereniging van Waterbouwers)
- Aspects to evaluate:
 - the effectiveness on CO₂-reduction
 - administrative costs at the different levels
 - feedback of companies



Future

- Evaluation CO₂PL: analyse the outcome and act on it in cooperation with stakeholders.
- CO₂-PL certification: The Ministry of Infrastructure and Environment (including Rijkswaterstaat) will be certified at level 3 in 2017 and at level 5 before 2020
- Our networks have to be energy –neutral by 2030.
 - Reducing energy use
 - Increasing use of sustainable energy and fuels
 - Using assets to produce sustainable energy
- Working on biobased economy / assetmanagement
- Circular economy is the future





More information?



- About the CO2 performance ladder:
 - www.skao.nl
- About the DuboCalc methodology
 - <http://www.youtube.com/watch?v=cAaL4FfBQNC>
<http://www.youtube.com/watch?v=LJY9QzxIW2w>
- About sustainability Ministry of Infrastructure and Environment
 - <https://publish.folders.eu/fixed/1042237?token=a9f3e21d8f7a7e9d19c11817115749ef&pageMode=single> and
 - <https://www.rijksoverheid.nl/documenten/kamerstukken/2016/06/05/energieneutral-e-netwerken-in-beheer-van-rijkswaterstaat>
- About the Rijkswaterstaat procurement policy
 - <http://www.rijkswaterstaat.nl/zakelijk>

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More information?

www.rijkswaterstaat.nl/zakelijk

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