



An Introduction to CONCAWE: What Does CONCAWE Accomplish? A Case Study

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A Case Study – CO₂ Benchmarking

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- Where did it all start?
- ▶ Draft revision of ETS Directive (2003 2009)
 - Provided framework & general principles
 - ▶ EU-wide GHG emissions reduction target: 20% by 2020
 - ▶ Reduction pathway (1.74% per year)
 - ▶ General principle of auctioning CO₂ allowances 2013-2020
 - Size of the allowances "cake" for EU refining (at 30 €/t CO₂)
 = 150 Mt/a CO₂ x 30 €/t = 4.5 G€ per year x 8 years = 36 G€
 - ▶ Free allowances (if any) granted through "ex ante sectoral benchmarks"
 - ▶ No free allowances for electricity-related emissions
 - Recognition that risk of carbon leakage and potential effect on international competiveness of EU industry would need to be addressed
- Some key elements were still to be finalised
 - ▶ Which sectors are "exposed" to carbon leakage?
 - ▶ How should the benchmarks be determined?
 - ▶ How would benchmarks be applied to grant free allowances?

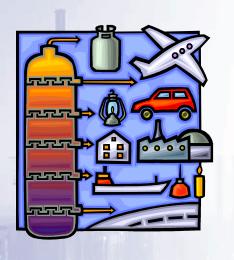
What was CONCAWE's contribution?

- Ad hoc support to Europia and technical input from CONCAWE secretariat to:
 - Evaluate the level of exposure of the Industry and potential cost consequences
 - Prepare analysis and material to justify status of sector as exposed to international competition and carbon leakage
 - Steer industry studies (e.g. NERA, WoodMac)
- Develop a fit-for-purpose benchmarking methodology
 - ▶ Creation of a Special Task Force RT/STF-1
 - ▶ Active members from 20 member companies (MCs)
 - ▶ First meeting in July 2008
 - Still going strong after 24 face-to-face meetings & numerous conference calls!
 - Roughly 1,000 mandays of MC effort in STF-1, i.e. about 1 M€ investment
 - At stake: roughly 70% free allowances out of the 36 G€ cake,
 i.e. about 25 G€



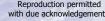
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How was the methodology developed?



Analysis of alternative approaches

- ▶ Review of earlier CONCAWE work on energy and CO₂ benchmarking
 - ▶ t CO₂ per t crude?...
 - ▶ t CO₂ per t refined product?....
 - ▶ t CO₂ per t "UEDC"?.... Better but still 😕!
- Review of existing refinery performance indicators (Solomon)
- ▶ Evaluation of Solomon's proposed CWT concept
- Recommendation to adopt the CWT concept
 - Development of a detailed methodology in cooperation with Solomon
 - ▶ Adapt the generic Solomon concept to EU ETS context



What was delivered?

- Detailed fit-for-purpose methodology
 - Solomon report
 - ▶ Internal interim report (soon to be external...)
- Comprehensive data collection and CWT calculation template
- Collection and analysis of refinery data for 98 mainstream refineries and 15 "atypical" sites
 - ▶ Determination of the EU refining CO₂ performance curve
 - Determination of the refining benchmark
- Verification of a sample of the refinery population data (20 refineries)
 - Development of a rule book
 - Development of a verification protocol
 - Selection and steering of verifier



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What else was and will be delivered?

- Assessment of options for open questions
 - Choice of baseline activity reference period
 - ▶ Treatment of capacity extensions and New Entrants
 - ▶ Treatment of atypical sites through "fall-back" options
- Assistance with review of EC guidance documents
- Facilitation of the official data collection process
 - ▶ Ongoing 1Q11 to 3Q11
- ·?



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Are we there yet???

- ▶ A year ago we thought we were!
- ▶ There have been 14 STF meetings since then....
- Are there even more devils lurking in the details?



▶ Why?

- Convince relevant stakeholders that this is the right way
- Gain recognition and credibility as "constructive experts"
- What?
 - ▶ Express complex technical issues in an understandable way
 - Demonstrate the pros and cons of the different options
- ▶ To whom?
 - ▶ Internal Europia, MCs, NOIAs
 - ▶ Related sectors Petrochemicals, Industrial Gases
 - External Commission, MS authorities and their consultants
 - ▶ Visits to Poland, Italy, Netherlands, UK, France, Belgium, Germany, and counting....
 - ▶ Numerous meetings with Commission and Ecofys

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So what did we really achieve?

- ► An industry-wide, technically sound CO₂ benchmarking scheme
- ▶ A strong consensus around the methodology throughout the EU refining sector
- Trust, acceptance and credibility from the regulator
- ▶ A fair deal for refiners within the constraints of the EU ETS

And why was it successful?

- Recognition of the importance of the subject matter for the industry
- Urgency tight regulatory deadlines
- ▶ CONCAWE is an effective vehicle for coordinated action and pooling of resources in these circumstances

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Thank you for your attention