

Carbon Credits : A Marine Industry First

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Carbon Credits : A Marine Industry First

International Paint have worked with The Gold Standard to develop the first approved methodology to generate carbon credits for the marine industry

- The methodology is both unique and pioneering.
 - First for the marine industry
 - First to consider moving articles (ships)
 - First to go beyond geographic boundaries
- Now recognised as the “Best Offsetting Project 2015*”



[*Environmental Finance Awards 2015](#)



Carbon Credits : A Marine Industry First

Generation of carbon credits means that emission savings from green technologies are independently verified

- Reductions in greenhouse gas emissions and therefore fuel savings from retrofitting efficiency improving technologies can be independently verified
- Ship operators are financially rewarded for emission reductions
- New source of finance in a difficult market

To qualify for carbon credits ship owners are required to upgrade their vessels from a biocide-containing traditional antifouling to Intersleek® technology

- The emission-saving of Intersleek® is determined and directly related to the amount of carbon credits generated
 - 1 tonne CO₂ saved = 1 carbon credit



Who Are The Gold Standard?

The Gold Standard Foundation is a UN-mandated organisation for validating and issuing carbon credits

- Created in 2003 by the Worldwide Fund for Nature and now used by over 80 NGOs to create carbon credit funding for green initiatives
- Remit is to develop and approve carbon reducing methodologies and issue verified carbon credits
- The governance of the Gold Standard is under the Kyoto Protocol United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM)

Gold Standard

International



Why The Gold Standard?

International Paint chose to develop a methodology with The Gold Standard due to their trusted status in the carbon markets

- The eligibility requirements for The Gold Standard perfectly matched the environmental credentials of Intersleek® which have been validated through an externally audited Eco-Efficiency Analysis
 - **Environmental** : Protecting the environment through preventing the release of biocides
 - **Sustainable** : Long-term protection delivered using fewer resources
 - **Energy Reduction** : Proven fuel saving capabilities
- Carbon credits generated through an approved Gold Standard methodology command higher market prices

Gold Standard

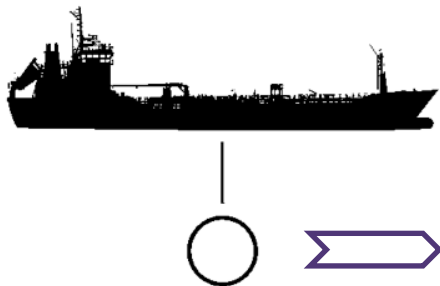
International

The Process of Claiming Carbon Credits

The outline process for generating carbon credits is

How does the Process work?

Ship converts to
Intersleek® technology



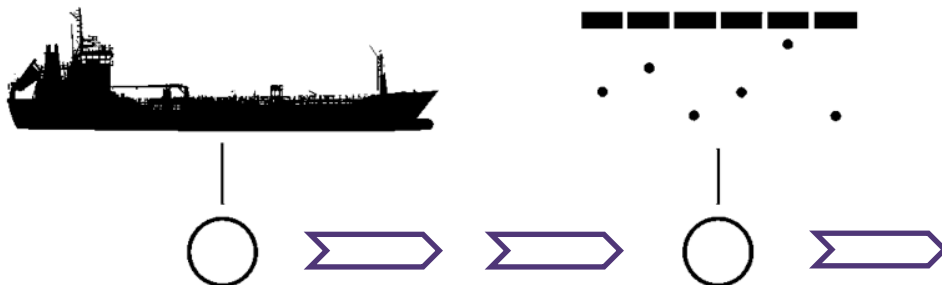
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Data analysed and
a claim submitted to
The Gold Standard

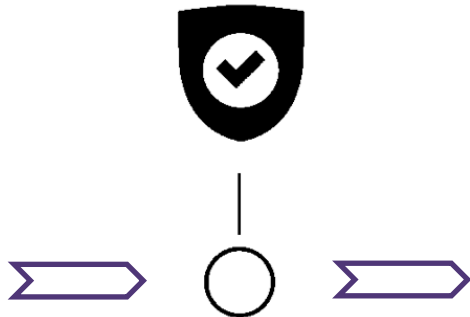


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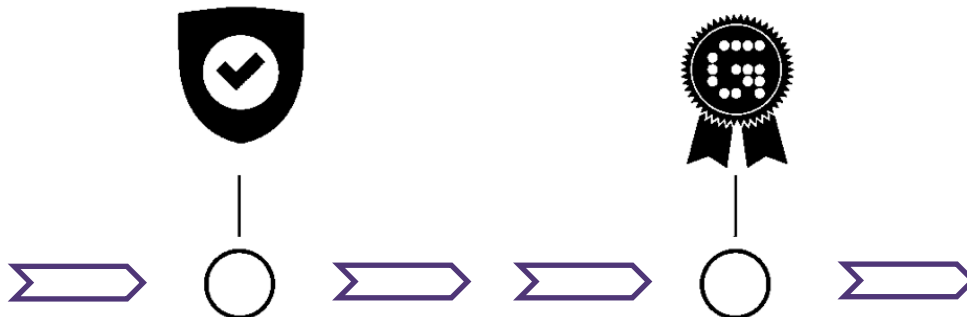
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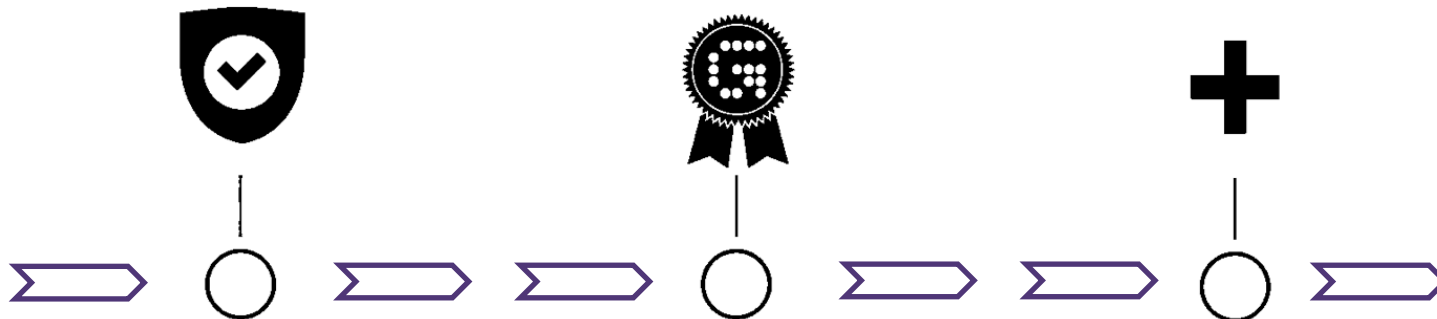
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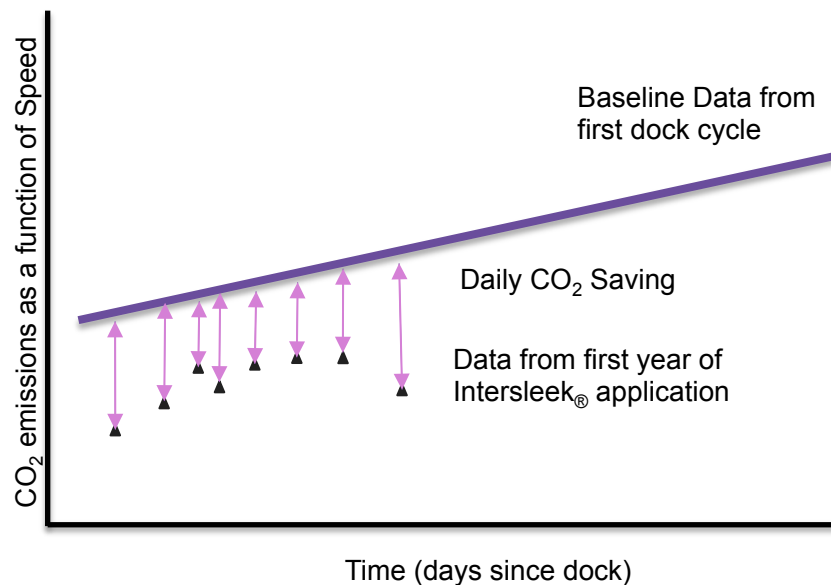
Credits
available



The Methodology

The methodology is based on data received from ships which is then translated into greenhouse gas emission savings

- A baseline emission level is determined prior to the application of Intersleek®
- The same data source is then used to determine the emission savings after the application of Intersleek®



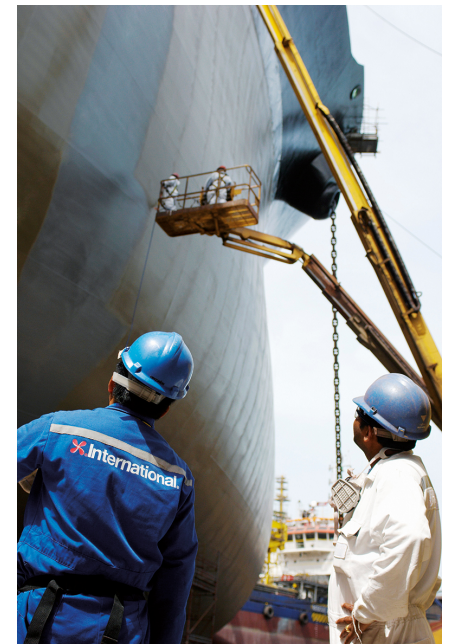
Vessel Eligibility

A vessel becomes eligible when it is converted from a biocidal antifouling to Intersleek®

- Carbon credits can be claimed until the vessel has been recoated
- Vessels with intermediate dockings (2 or 3 year dock cycles) can continue to claim for each dock cycle until they are recoated

Vessels become ineligible for claiming credits if

- The Intersleek® is recoated
- Any other energy-saving device is installed (e.g. PBCF, Mewis Duct)



Participation in the Carbon Credit Project

In order to participate in the project, the vessel operator simply has to agree to take part and share noon reports

- The methodology is based on noon reports so there is no requirement to install a monitoring system
- A standard contract will be agreed detailing data sharing and transfer of carbon credits

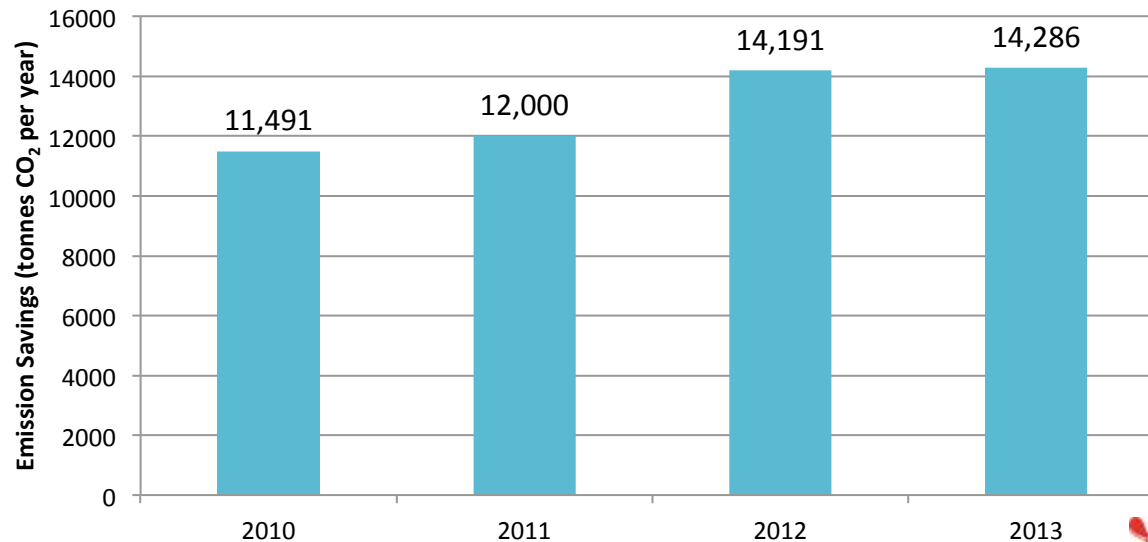


Example

Vessel data is analysed and statistically tested to give annual emission savings and hence amount of carbon credits for claim

- Example vessel taken from the first project submission (Tanker)
- Total claim ~29,000 carbon credits

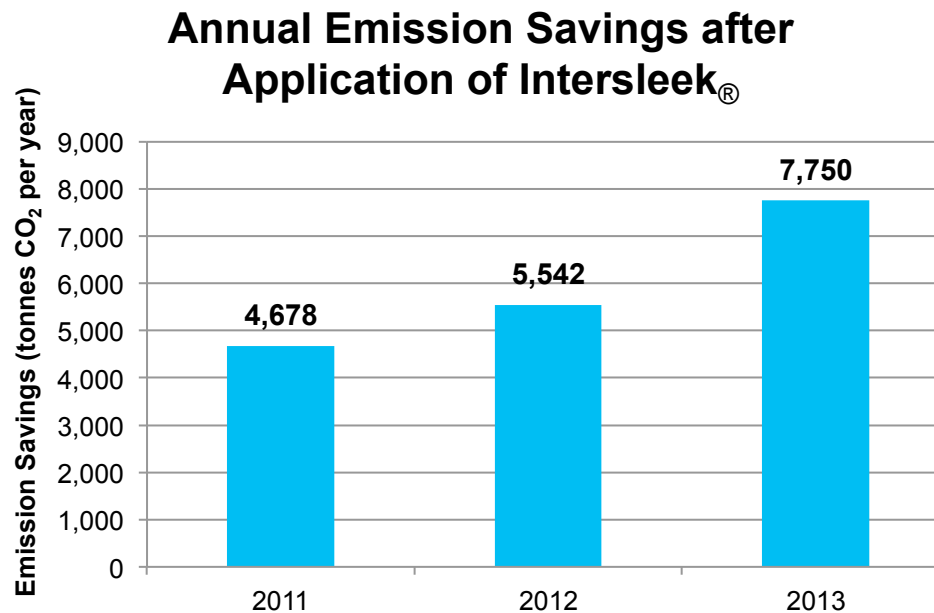
Annual Emission Savings after Application of Intersleek®



Example

Vessel data is analysed and statistically tested to give annual emission savings and hence amount of carbon credits for claim

- Example vessel taken from the first project submission (Ro-Ro)
- Total claim ~13,000 carbon credits





Intersleek® 1100SR – Carbon Credits

CASE STUDY

Vessel	Spes
Owner	Grimaldi Lines
Type	Pure Car Carrier
Size	16,802 DWT

Intersleek 1100SR applied to the whole underwater area in August 2013

Fuel Savings 12% compared to Ultra SPC over the full docking cycle

Carbon Credits 4,230 awarded for Aug 2013 to June 2015





Use of Carbon Credits

Carbon credits generated from voluntary schemes are true carbon reductions and therefore reflect real environmental benefits

- Carbon credits can be:
 - **Retired** to offset greenhouse emissions (e.g. offices) to further enhance environmental profile
 - **Sold** to generate revenue
 - **Passed-on** to help offset the emissions of your customers
- Carbon credits generated will be shared with the ship operator
- Administration charges will be taken from the claim itself and the process will be cost neutral to the ship operator



Who Buys Carbon Credits?

Carbon credits from the voluntary market are purchased by companies wishing to offset their own or their customers' emissions

- Examples of companies purchasing carbon credits are¹

3i	ICAP	RSA Insurance
Aviva	Investec	Standard Chartered
Barclays	Land Securities	BSkyB
British Land	Man Group	Pearson
Hammerson	Old Mutual	Tui Travel
HSBC	Royal Bank of Scotland	WPP
Imperial Tobacco	Reckitt Benckiser	Unilever
KLM	British Airways	UPS
DHL/Deutsche Post	Panasonic	Microsoft
Virgin Atlantic	Thai Airways	Qantas
Kuoni Worldwide	Brand-Rex	

¹ Sources – Carbon Retirement report “*The State of the Voluntary Carbon Offsetting in the FTSE100*” and Individual company disclosures



Project Status

The first carbon credit claim has successfully resulted in the issuance of over 126,000 credits

- Data from 16 vessels was analysed and emission savings of 126,000 tonnes of CO₂ have been quantified
- **126,000 carbon credits** have been issued to International Paint
- This represents 136,000 tonnes of **independently** validated and verified emission savings
- Or **40,000 tonnes** of independently validated and **verified** fuel savings
- This represents over **\$8M** in fuel savings at today's prices
 - Validation and verification by independent **UN-mandated organisations**





Project Status

Two customers have benefited from the first pilot project

- Greek Tanker operator has received **~15,000**
- Italian ferry and Ro-Ro operator has received **~92,000**
- Carbon credits are in the process of being sold through three brokerages with target price of **\$6** per credit
- Total claim value **>\$750,000**





Benefits to Marine Industry

The benefits of generating voluntary carbon credits to the Marine Industry are wide ranging

- Helps to remove technology investment barriers resulting from the owner/charterer relationship as the company which invests in the technology gets the benefit
- Externally validated fuel and emission savings
- Proven reduction in environmental impact
- Significant positive impact on the environmental image of shipping
- External source of revenue to help investment in green technologies

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