

SSI progress report

a case for more action



About the SSI

The Sustainable Shipping Initiative (SSI) brings together leading companies from across the industry and around the world with two influential NGOs, to plan how shipping can contribute to – and thrive in – a sustainable future.

Our goal is to transform the global shipping industry and the wider maritime sector, establishing a new sustainable approach as normal.

We want to help industry leaders look beyond their immediate

concerns by understanding the long-term challenges and opportunities they face.

As highlighted and anticipated by the [Case for Action](#) we published in May 2011, sustainability trends are becoming business drivers for shipping, as well as wider global industry.

Well-managed businesses are responding to these drivers to ensure their survival. However, truly leading businesses are not simply reacting to pressure. By

thinking big and working together they are proactively shaping the context in which they operate.

When the leaders of these businesses collaborate there is a multiplier effect which can lead to a paradigm shift in the industry.

By providing a platform for leaders from across the shipping value chain, the SSI hopes to drive this process of change.

www.ssi2040.org

SSI members:



NGO members:



SSI knowledge partners:

B9 Shipping, Deloitte, Hewlett-Packard, Holman Fenwick Willan, University of Strathclyde, United Nations Environment Programme – Finance Initiative, University College London Energy Institute – who have all supported the SSI and ensured that we are bringing to bear the right expertise for each of our work streams.

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Thanks to the SSI members and knowledge partners for their input in developing this progress report.

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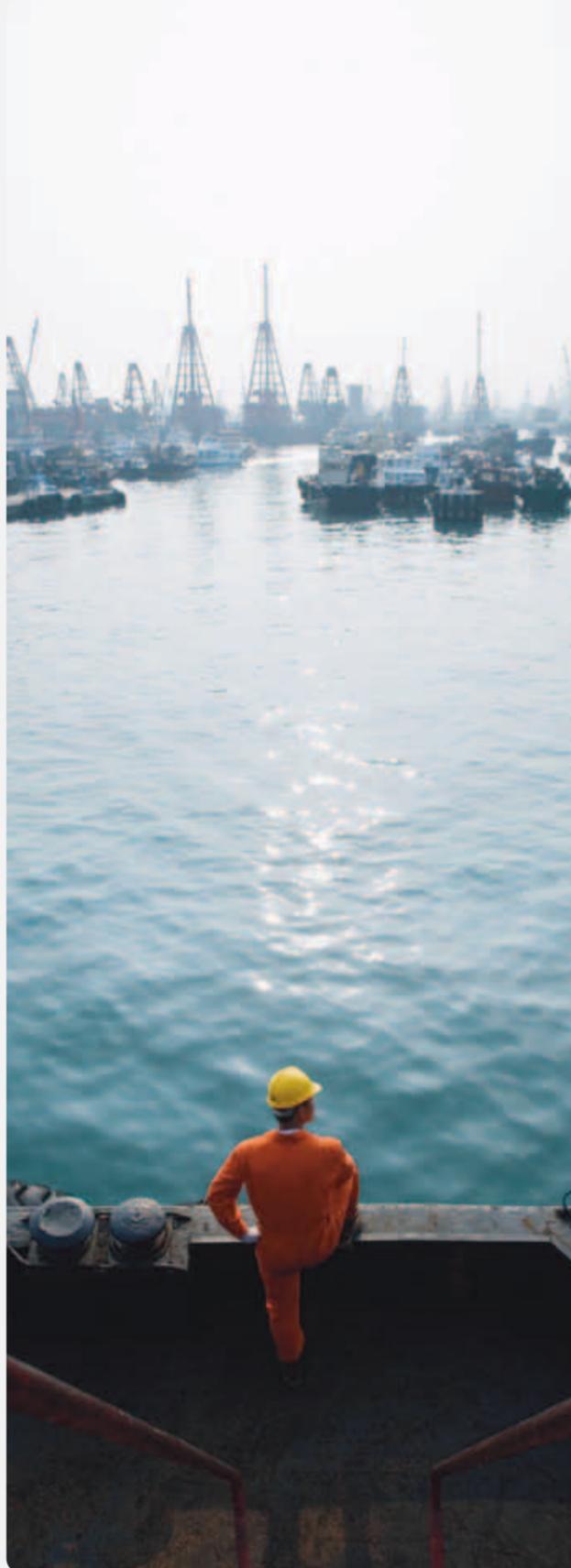
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Date of publication:
September 2013

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introduction



The SSI was founded in late 2010. In May 2011, we published a Case for Action, which identified key sustainability challenges for the shipping industry relating to energy, transparency and shifts in global trade. In October 2011, the SSI's members publicly committed to take action on the challenges raised in the [Case for Action](#), setting out their response in a collective [Vision for 2040](#).

Since then, SSI members have been working together on a series of practical work streams that tackle key elements of the Vision for 2040 – finding ways to combine positive social and environmental performance with commercial success. They have also made significant individual progress within their companies, from ambitious CO2 reduction targets to new ecoship designs. This progress report describes both those individual and collective practical outputs, and how you can use them.

What has worked well

Our practical work streams mark the start of a process that will result in innovative solutions to sustainability issues – a process driven by the SSI.

We have already provided the industry with a finance model for large-scale retrofits of fuel-saving technologies; we have provided a guidance resource for the selection and application of beyond-compliance sustainability rating schemes; and we have provided valuable case studies and guidance on developing the business case for retrofitting 'double-digit' (greater than 10%) fuel-saving technologies.

Other outputs show promising progress towards our longer-term aims. In our Closed Loop Materials Management work stream, we have conducted three live pilots to demonstrate the feasibility of logging and tracking 97% of the materials used in the construction of a ship. This is an important step towards our long-term goal of establishing cradle-to-cradle responsibility for shipbuilding materials, which we believe will have profound implications for the way ships are built, maintained and dismantled.

Sharing knowledge

The SSI is committed to creating large-scale change in the long term. Trialling innovative technologies on ships is an important part of the picture, but it's also about sharing what we've learned and developing collective approaches which will enable us to turn small-scale practical actions into industry-wide change.



Our energy technology and finance work has helped us to identify some of the barriers that currently prevent promising technologies from getting the investment they need; we're now developing responses to overcome these. We've developed guidance for both technology developers and potential purchasers to ensure the right information is available to justify large-scale investments. Our finance work has provided the industry with a mechanism for access to finance for large-scale retrofits while at the same time calling into question some of the industry-perceived barriers to change, such as split incentives¹.

On an individual company level, we have seen many great examples of sustainable business practices, including;

- Maersk achieving its CO2 targets several years ahead of schedule and replacing these with even more ambitious targets for 2020.
- The China Navigation Company (CNCo) now insists upon industry-leading health, safety and environmental standards in the ship-breaking yards it uses.
- Shipping customers AkzoNobel, Unilever, Rio Tinto and Cargill have incorporated ship efficiency performance criteria into their chartering and procurement decisions.
- Namura, Daewoo Shipbuilding & Marine Engineering (DSME) and UMin are developing ambitious energy-saving designs and technologies for new ships; and Wärtsilä is doing the same, plus driving innovations of natural gas in shipping.
- Additionally, BP Shipping is pioneering the Virtual Arrival concept in charter party clauses and implementing voyage optimisation techniques for its day-to-day voyages.

- Classifiers Lloyds Register and Det Norske Veritas (DNV) are providing performance information on new technologies.

Together, these actions add up to significant progress on sustainability issues. And the collaborative approach of the SSI enables members to share their knowledge and scale up actions beyond the usual 'one-off' approach, accelerating the rate of change within the industry.

Making sure we're on track

It comes as no surprise that creating change across an industry as large as shipping is not easy, and we still have a long way to go. A core part of our 2013–14 programme is the development of a road map, enabling us to prioritise action, track progress towards the Vision for 2040 and hold each other to account on individual progress.

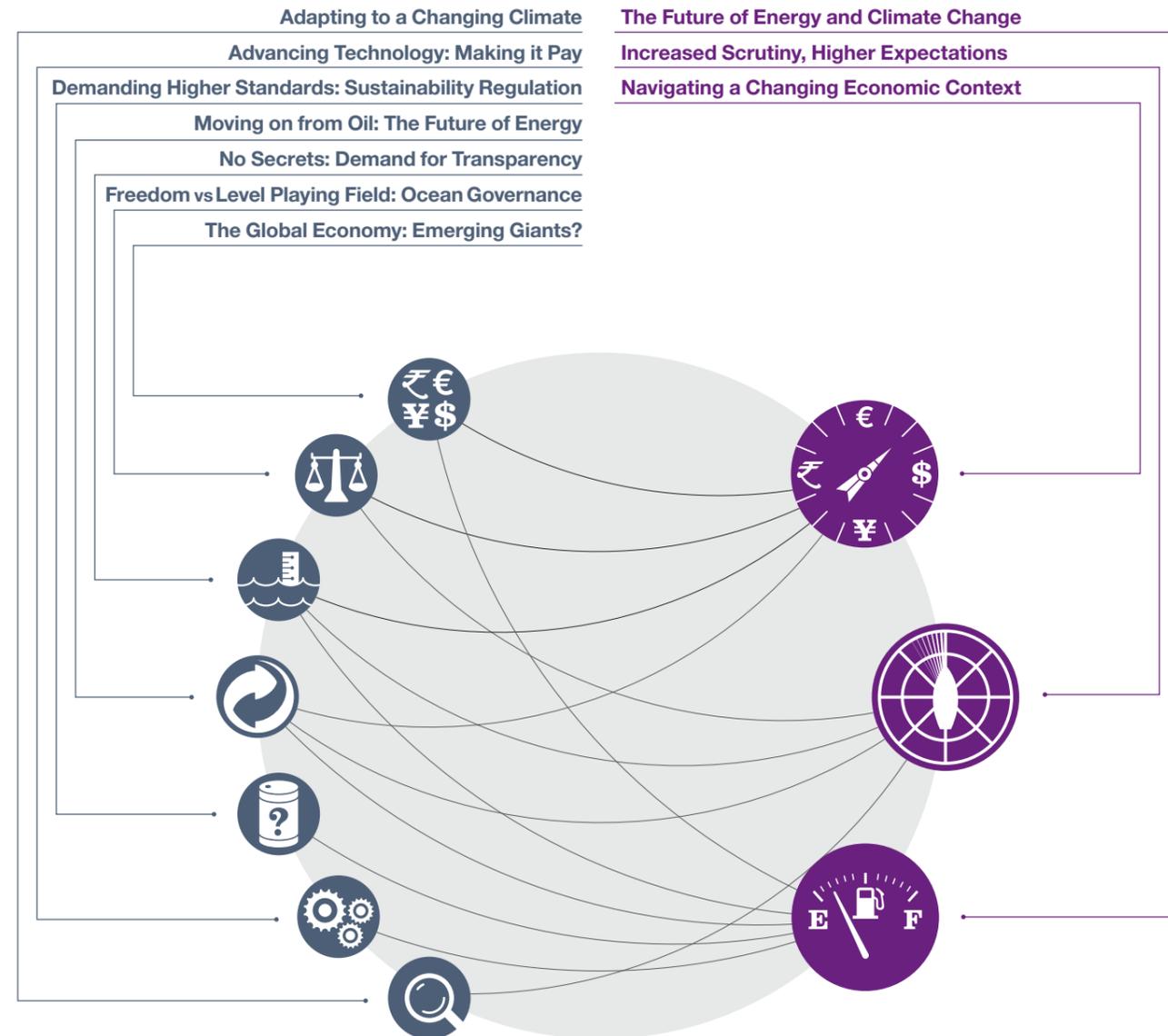
As we transition to becoming an independent charity, we are confident that the SSI will become an increasingly important progressive voice for change within the industry. In the future we plan to scale up more practical solutions that combine sustainability with commercial success. Together we will continue to work towards our Vision for 2040.

¹ A market barrier to an innovation, in which higher capital costs of an innovation are borne by one market participant whilst an operating party benefits from cost savings or profits.

the SSI challenge

The SSI's Case for Action is visually summarised below. It highlights the key trends and challenges facing the industry that our initial work streams have responded to.

Find out more:
www.ssi2040.org



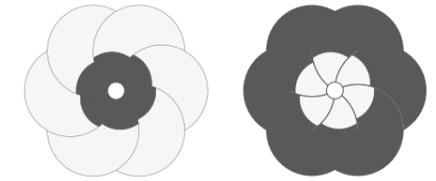
the SSI vision and key areas for action

Below shows a visual representation of the SSI Vision and aspirations for how the industry needs to respond to the challenges addressed in the Case for Action, backed up by specific commitments to action.

Key

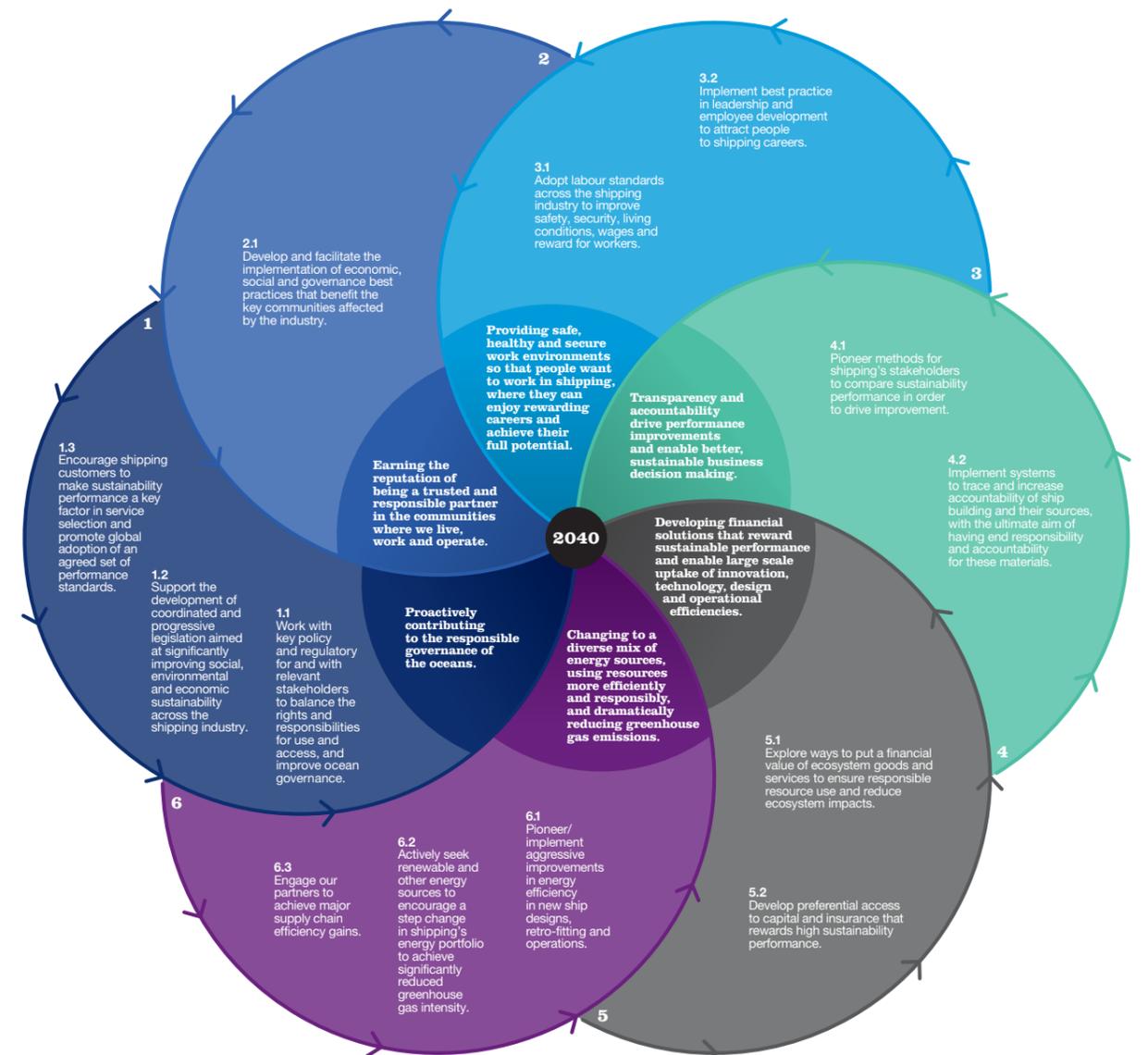
The vision:
 Central section

Key areas for action:
 Outer section



SSI activities over the last 18 months have helped us make the first steps towards realising our shared vision.

Read the full SSI Vision document:
www.ssi2040.org



NGO commentary

Forum for the Future and WWF are pleased to act as NGO partners to the SSI.

Since joining the initiative as founder members in 2010, our role in the steering group has been to check and challenge the SSI, thus ensuring that the level of ambition and action is commensurate to the challenge of moving the shipping industry towards sustainability².

What makes this group a leadership group?

Leadership from within the shipping industry is essential if we are going to achieve the ambitious level of change required to survive and thrive in an uncertain future. And by 'leaders' we mean businesses that are not simply responding to regulatory or immediate business pressure. Rather, we are referring to progressive businesses with the courage and foresight to innovate for success, and shape the context in which they operate.

The SSI should be a group of such leaders, companies that between them are representative of the whole industry and ahead of the curve in their sustainability thinking and performance.

But we need to be clear, the SSI is not a philanthropy group. Our aim is to create solutions that make commercial sense, and will be taken up at scale by the rest of the industry.

Are we happy with that has been achieved?

We know we have a long way to go to achieve the aspirations set out in Vision for 2040, but we are starting to make progress.

Creating change in the shipping industry is hard, particularly in economically challenging times. Countless campaign groups, including WWF, have been lobbying and campaigning for change for decades, and while there have been notable successes, progress has not been commensurate with the challenges ahead.

We believe that working in partnership with leading companies is the right thing to do, and we are pleased to see such a high level of commitment to change displayed by both the members of the SSI and by the individual representatives, many of whom have worked tirelessly to deliver positive outcomes. There is a real commitment to the long-term success of the SSI.

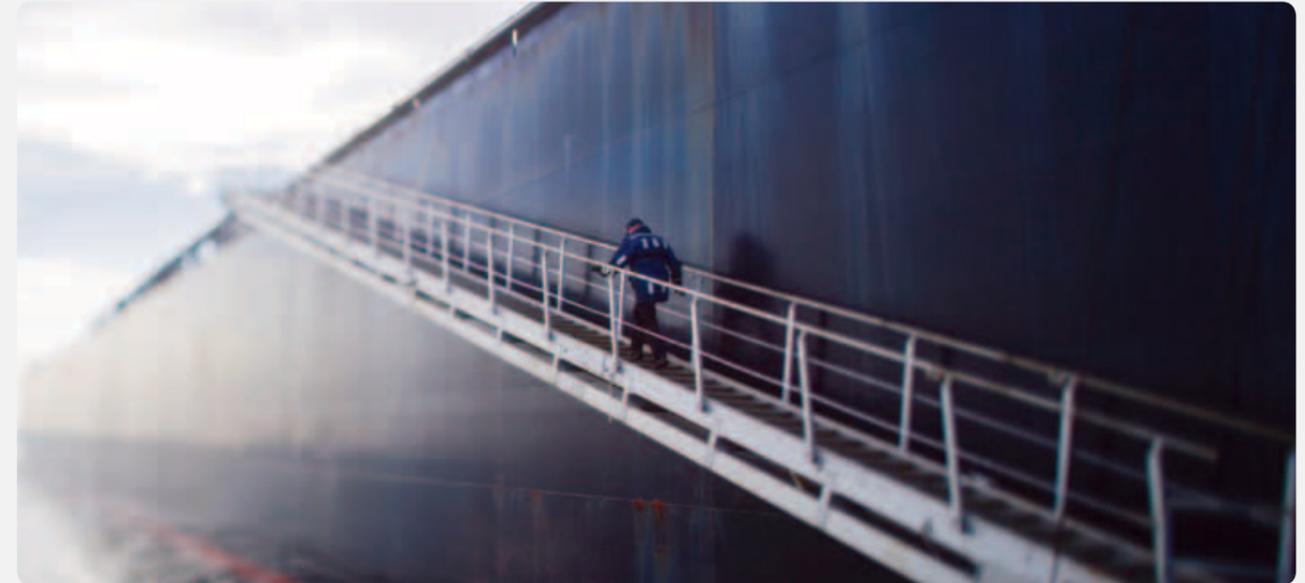
We are also aware that the shipping industry seascape is constantly changing, and that SSI members should not be complacent. They must constantly review their progress, and reality check whether or not the level of ambition is sufficient to create a future where sustainability is a business norm.

We were therefore pleased with the formation of the Blue Skies working group in 2012, made up of a small number of members with a remit to look beyond the SSI's day-to-day activities. Through monitoring trends, looking for the big innovation ideas that are emerging and recommending future actions, the group will help to ensure that we are always on the cutting edge.

The Blue Skies Working Group first reported to the SSI in 2013, updating the members on recent developments including:

- Future fuels: the pros and cons of LNG, the timescales for biofuel, and reports on biofuel trials by Maersk and DNV.
- Advances in new ship technology: what does 'eco-ship' mean in practice and what do 25–30% improvements in new ship efficiency mean for the retrofit market?
- Emerging economic drivers for 'zero fuel cost' ships for low-GDP economies in the South Pacific, and radical, zero fuel cost solutions, such as Greenheart's solar-sailing container ships. Find out more: www.greenheartproject.org

² Forum for the Future wears two hats in this initiative: it acted as the convener of the SSI but also plays a clear and separate NGO role.



Looking forward helps to push the level of ambition. Reviewing the trends helps to spot potential for change, and will help us to ensure that future planning leads to a sustainable outcome.

What next?

The SSI has made good progress, but we still have a lot of work to do. As NGO members, WWF and Forum for the Future recommend the following:

- More sharing of individual and multilateral actions. Individual members are doing a lot, but we need to accelerate the rate at which best practice is shared and implemented across the group.
- The SSI has begun to deliver tangible outcomes following a period spent forming the group and experimenting with ways of working. The SSI now needs to focus on scaling up the impact of our outcomes, so that we can clearly see that what we are doing is having a positive influence on the rest of the industry.
- The SSI needs to be the progressive voice of the industry. We need to amplify that voice via engagement and dialogue, especially to customers and regulatory bodies, to promote action and regulation that rewards sustainability performance within the shipping industry.
- By co-ordinating and communicating our activities and sharing joint lessons, we will ensure we optimise the potential to create change. We must also continue to collaborate with other sustainability initiatives.
- The SSI has good short-term goals and long-term vision. We now need to work on evolving our road map so that we can be clear about the route ahead, the rate of change and the level of ambition that is required if we are to deliver on our Vision for 2040.

- Finally, there is a need to formalise how we define a 'leader' in shipping. Inevitably, the SSI membership will change over time. In order to maintain the integrity and ambition of the group, we need to be more clear about what we mean by a 'leader', and ensure all existing and new participants understand what is expected of them as members of the SSI.

Sam Kimmins, Forum for the Future

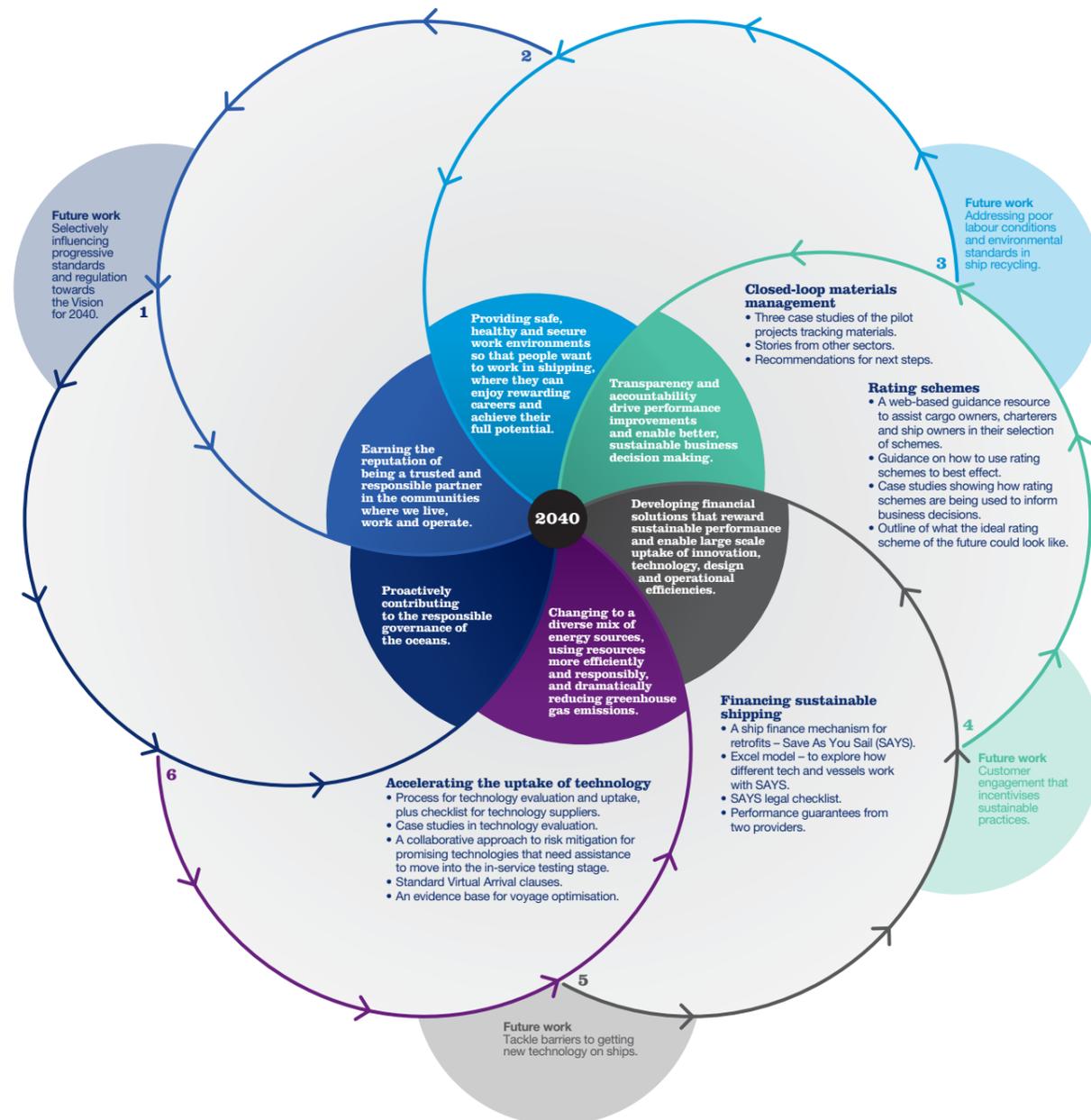


Simon Walmsley, WWF



SSI work stream activities

This section gives you an overview of how the initial SSI work streams help take us towards the 2040 Vision and provide an overview of the tools available to the industry. It also indicates how our future activities will contribute towards the vision.



Our initial collaborative activities included:

- Developing three pilots to explore how to track and trace materials in ships, plus have a new working database system to help with working towards closed loop materials management.
- Guidance on how to use and improve sustainability rating schemes in shipping.

Two of the SSI's four work streams have focused on overcoming barriers to the uptake of sustainable technologies, such as retrofits of existing ships.

Specifically, we have looked at:

- **Financing sustainable shipping:** creating access to finance to enable the retrofit of established technologies.
- **Accelerating the uptake of technology:** demonstrating the business case for new technologies and techniques.

financing sustainable shipping: save as you sail

The SSI has created a Save As You Sail (SAYS) financial model, designed to overcome a potential split incentive that is a key barrier to financing the energy efficiency retrofit of vessels. It aims to accelerate progress towards low-carbon shipping and a step change in efficiency.

The challenge

Ship owners face high competition to charter out fuel-efficient vessels, but are often unclear whether investing in retrofitting their fleet will increase profits, despite the existence of proven, cost-effective technologies. As charter durations get shorter, there are fewer opportunities to share investment with charterers, leading to a split incentive: a ship owner may invest the up-front capital to put in energy-efficient technology, but doesn't then recoup the costs from fuel savings as they charter their ships out, as this goes to the charterers. This problem is particularly apparent for short-term time charters.

We need new financial tools to enable informed, transparent negotiations, guarantee savings and enable third-party financing to vessel owners for efficiency upgrades.

The ultimate objective

To enable the shipping industry to access appropriate financing through a set of financial tools and products in order to access available technologies and help new technologies scale faster.

Results and outcomes

The work stream has developed a robust financing package, Save As You Sail (SAYS), that will enable both owners and charterers to benefit from efficiency upgrades. SAYS includes a financial model that owners, charterers and financiers can use to model returns on investment and profits from more efficient vessels; and a set of legal considerations needed to enable third-party financing of the retrofit costs in the short-term time charter market.



We need a change of mentality and more of a long-term partnership between owners and charterers...

Using the model, an owner and a charterer can identify the estimated fuel cost savings and return on investment associated with different upgrade options; this is used to negotiate and agree the charter hire rate. The owner has access to a loan for the upfront costs, to be paid back (with fixed-rate interest) over two or three years. If the first charter is shorter than the loan, SAYS enables changes of charterers during the financing period.

With some technologies providing a return on investment of 50% and more, there are sufficient fuel cost savings for the charterer, owner and finance providers to profit from the expected fuel cost savings.

What the work stream did

Evidence that we compiled with University College London led us to focus on the short-term charter market, where we found the split incentive problem to be most pertinent.

A first workshop gathered initial ideas of how to solve the split incentive challenge, with a second to refine and build the solution. The final model was thought to be the most viable because of its simplicity, mainstream applicability, relevance to other technologies and ability to enable one owner to repay during successive charters. We worked with knowledge partners from across the shipping industry to accelerate the development; Deloitte has taken a lead on financial modelling of SAYS, while Holman Fenwick Willan has been working on the contractual arrangements.

The work stream is now in discussions with owners and charterers to pilot SAYS, to get a vessel financed and retrofitted in the near future.

What does this mean for SSI members and the wider shipping industry?

There are retrofits available that are proven: the Deloitte financial model, using data from case studies collected by Wärtsilä and International Paint (a subsidiary of AkzoNobel), shows that these payback periods can be very reasonable (two–three years). We have ensured that finance need not be the barrier to taking up near-term technologies, and see this working for more radical technology over time.

There is financing available from large banks to do this for a whole fleet. ABN AMRO is offering finance for a pilot on one or two ships, but once the concept is proven, we could see this working at scale. We have learnt that ship owners often have cash available to retrofit a few ships, but may need third party financing for a whole fleet.

The SSI will continue to offer SAYS as a pilot. During the development of SAYS, it has also worked closely with the [Carbon War Room \(CWR\)](#), which is developing a complementary finance mechanism designed to

overcome the split incentive for a different market sector to the one SAYS is designed to help. Thanks to this collaborative approach, the SSI's work on SAYS will benefit an even wider section of the industry.

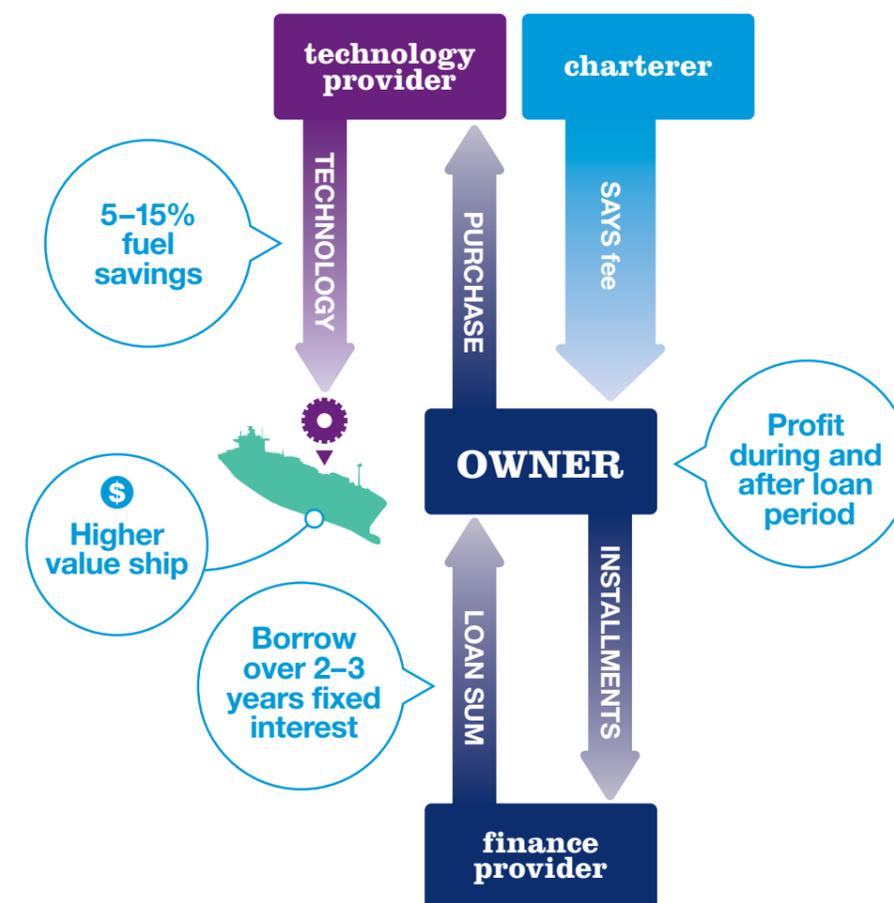
Tools available



- A ship finance mechanism for retrofits plus documents to explain SAYS in more detail, including two working examples.
- An Excel spreadsheet model developed by Deloitte to explore cash flows and profitability of a SAYS project.
- A summary of contractual arrangements by HFW.

Features of SAYS:

- Third party retrofit financing for owners in the short-term time charter market.
- Successive charters possible during financing period.
- Transparent understanding of fuel cost savings for hire negotiations.
- Charterers lower overall costs through fuel cost savings and reduce risk through improved performance warranties.
- Technology performance guarantees provided offered to owners by some providers.

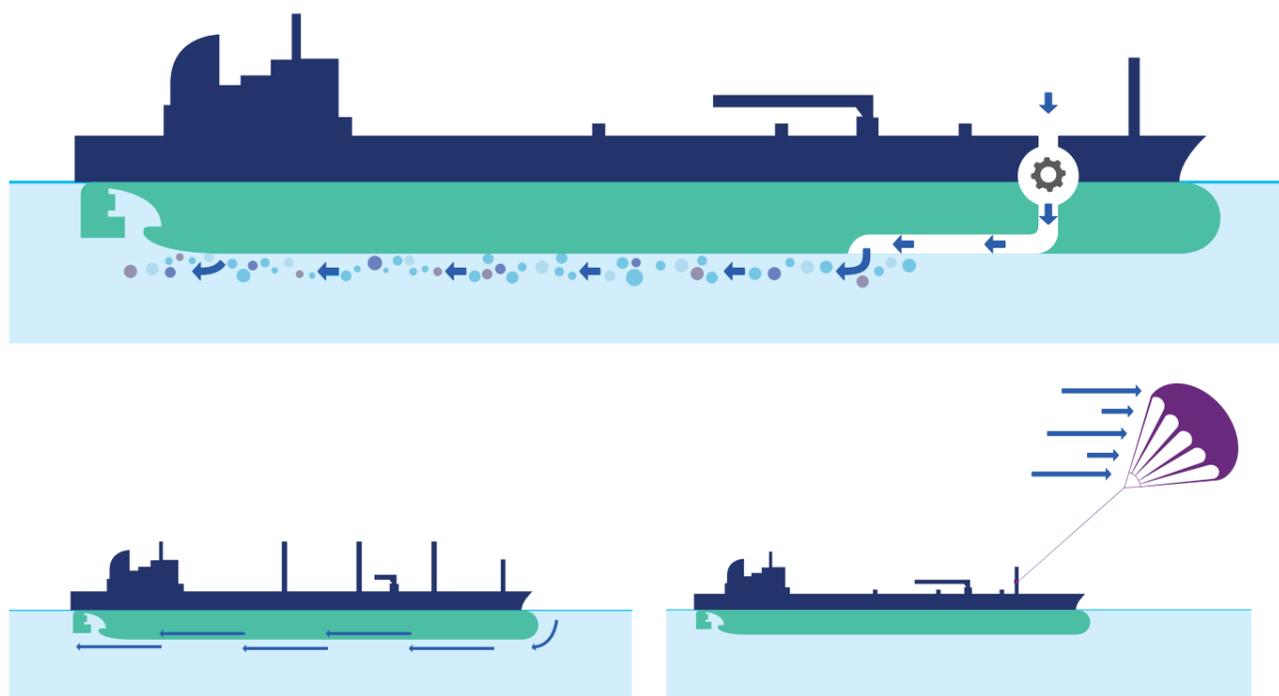


accelerating the uptake of technology: demonstrating the business case for new technologies and techniques

The SSI explored how to overcome barriers to the uptake of new technologies and techniques which improve the operational efficiency of ships, potentially delivering energy efficiency savings of 10% or more and payback periods of less than five years.



Step change technologies offer the potential for double-digit cuts in energy consumption. But many are stalled for the sake of a single full scale implementation to prove savings...



The challenge

The challenge for this work stream was to find out how shipping companies and technology providers could work together to build a business case which:

- Enables innovative step-change technologies to make the leap from the drawing board onto the water.
- Enables the mass uptake of combined voyage optimisation techniques.

The ultimate objective

The SSI wants to see the widespread uptake of step-change technologies and operational techniques that will reduce ship energy consumption and dramatically cut greenhouse gas emissions.

Results and outcomes

We examined several new technologies and collaborated closely with suppliers to identify the following opportunities for streamlining and strengthening the process of technology evaluation:

- Collaboration works: Team members were able to compare and poll their analyses and check any findings, speeding up the examination process and creating greater confidence in the results.
- Share risk to enable in-service sea testing: There is limited appetite for risk in the shipping industry, especially in current economic circumstances. Computer and tank testing will often not provide the certainty needed for investment in demonstration projects, leaving technologies stalled for the lack of a single first mover to demonstrate them at full scale. Collaborative risk mitigation/sharing measures are therefore needed in order to get promising technologies onto the water.
- Supporting start-up companies is key: The start-up companies and innovators who develop promising ideas for shipping technologies and techniques face challenges in terms of financing the practical sea trials that owners and operators require in order to support an investment. Supporting start-ups is therefore another key area for action.
- In terms of the uptake of voyage optimisation techniques: Industry surveys suggest that the majority of the industry is implementing voyage optimisation measures, with the biggest energy consumption cuts currently being delivered by slow steaming. However, our work suggests that there are a number of barriers which are significantly limiting the realisation of voyage optimisation benefits in many fleets. These barriers include, for example, charter party agreements and lack of adequate data to quantify savings. We are now completing an evidence base to confirm implementation levels and the benefits realised for our members.

What the work stream did

- For the uptake of the step-change technology element of this work stream we evaluated the potential of several wind assistance and hull or lubrication technologies to deliver step-change energy efficiency savings. These technologies were selected due to their potential to provide double-digit savings, while being as yet unproven at full scale.
- We evaluated the potential of these technologies for new-build and retrofit applications, the practical issues, cost-benefit projections and the risks. This resulted in five technology case studies, examining the specific opportunities presented by the technologies, together with more general lessons on how we can accelerate the uptake of a new technologies 'on the water'.
- The uptake of the voyage optimisation techniques element saw SSI members sharing data on the implementation of measures such as slow steaming, weather routing and Virtual Arrival, along with the savings achieved and barriers to implementation.

What does this mean for SSI members and the wider industry?

- Innovative technologies and voyage optimisation techniques that could deliver some of the step changes in energy consumption needed to make the industry fit for the future are readily available. But to unlock their potential the industry and its suppliers must collaborate further to share risk and remove the barriers to the uptake of new technologies.

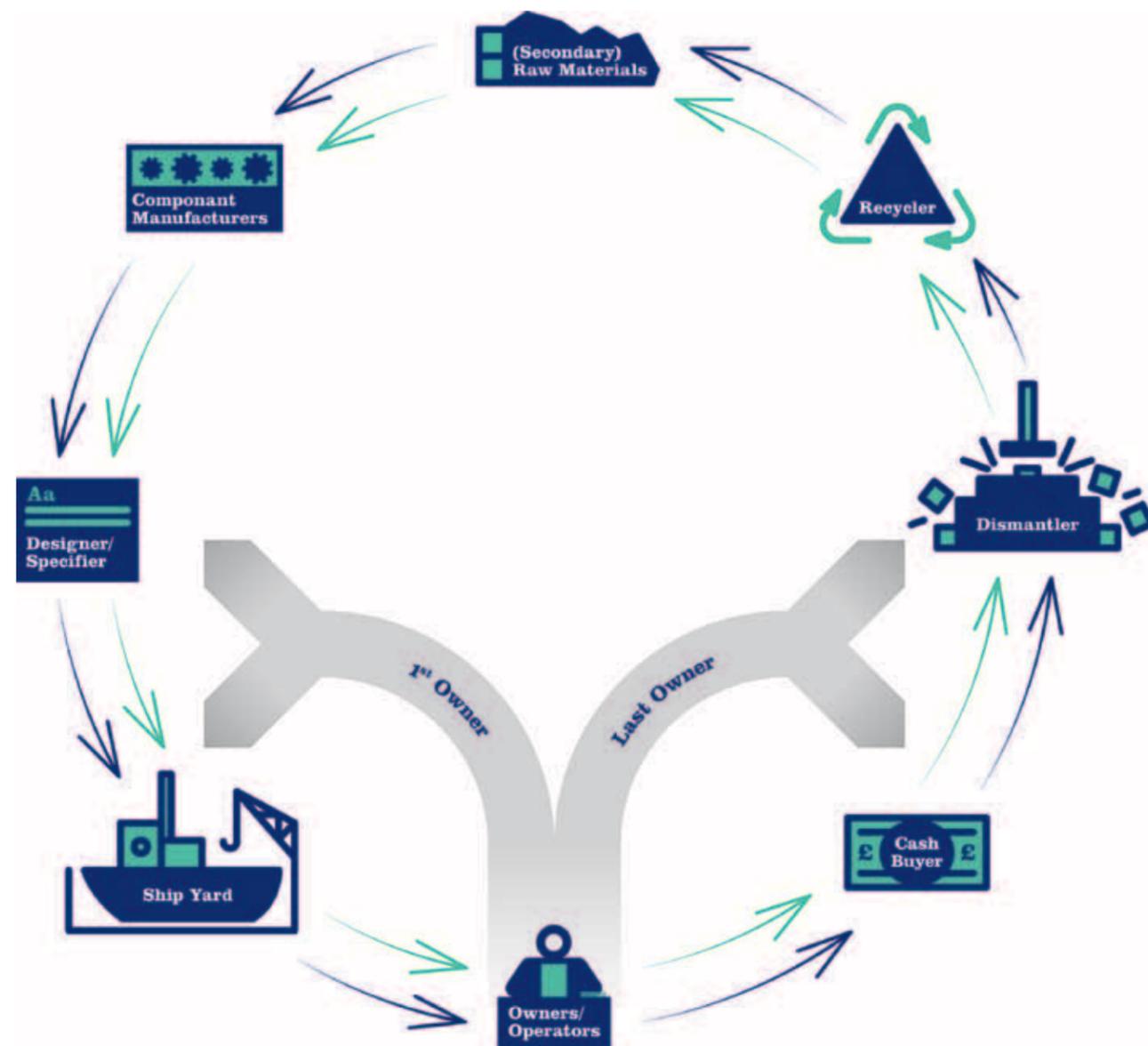
Tools available



- An evidence base for voyage optimisation, which includes implementation levels, savings achieved, barriers and opportunities for scaling.
- Case studies in technology evaluation created by SSI members.
- A process for technology evaluation and uptake, providing a checklist for technology suppliers.
- A collaborative approach to risk mitigation for promising technologies that need assistance to move into the in-service testing stage.
- Standard Virtual Arrival clauses used by the tanker industry for wider uptake.
- Full performance data for the Cargill Skysail, to be shared with SSI members after its implementation in late 2013.

closed-loop materials management

The SSI created three pilot projects and a stakeholder consultation process to investigate the feasibility and value of using a database system to track and trace shipbuilding materials.



Increased transparency and traceability also leads to more open supply chain relationships and opportunities for remanufacture, as well as more ‘upcycling’ and reuse.

The challenge

We set up this work stream to investigate how ships could be better designed, built, operated and dismantled to make the recycling of materials and components more efficient, and to find out whether this would increase a ship’s value.

The ultimate objective

The SSI hopes to encourage end-to-end responsibility and accountability for the social and environmental impacts of shipbuilding materials, from the way they are sourced through to construction methods and recycling processes.

Results and outcomes

We have now established that:

- A verified record of all materials used in a ship’s construction may increase its value.
- A materials database provides a single source of data for reporting on existing regulations, and future proofs against additional compliance reporting requirements.
- Increased transparency and traceability also leads to more open supply chain relationships and opportunities for remanufacture, as well as more ‘upcycling’ and reuse.
- Creating an effective materials tracking culture takes time and commitment, but also enhances social responsibility.

What the work stream did

The pilot projects have collected data about more than 96% (by weight) of all the materials used in the construction of two new vessels and a cruise ship cabin. Two of the projects involved working with Hewlett Packard to trial the use of an online database to track and trace the materials’ data. We spoke to key stakeholders to understand how this data could be used to support more effective reuse and recycling.

What does this mean for SSI members and the wider industry?

If scaled-up, the impact could be:

- Safer, cleaner, healthier and more profitable ship recycling.
- Significant CO2 savings as a result of more effective recycling in the wider ‘steel loop’.
- Potential CO2 and financial benefits from ‘design for remanufacture and reuse’ strategies.

Tools available



- A series of reports and case studies on the pilot projects.
- Stories from consultation from other sectors that have taken a similar approach to material management.
- Recommendations for next steps.



Data from the IMDS* system helped us to track down and eliminate Chromium 6, it has helped in the reduction of lead, the identification of plasticisers in materials and it has been essential in complying with regulations”

Karin Oldenburg, BMW

Insights from the automobile industry who use similar approaches to material tracking.

* IMDS is the tracking and tracing system used in the European automotive industry

sustainable shipping rating schemes — how to use and improve sustainability rating schemes in shipping



Beyond-compliance rating schemes benchmark vessels on their sustainability performance, allow customers and other stakeholders to select ships and reward ship owners based on a credible assessment of their sustainability. The SSI believes that increased demand for rating schemes has the potential to create significant change in the industry.

The credible benchmarking work stream has developed an independent reference and guidance resource to help cargo owners/customers, charterers and ship owners to:

- Select and use rating schemes.
- Benchmark vessels on their sustainability performance.
- Drive continuous improvement in standards.



Increased demand for rating schemes has the potential to create significant change in the industry.

The challenge

The challenge was to find a way of helping the shipping industry and its customers to navigate the growing number of beyond-compliance rating schemes, encourage wider adoption of rating schemes and improve sustainability performance in the shipping industry.

The ultimate objective

The overall aim is to provide the transparency and comparability that enables cargo owners, charterers and ship owners to integrate sustainability considerations into commercial decisions and move towards a more sustainable shipping industry.

Results and outcomes

Stakeholder research by Southampton Solent University identified five main barriers to uptake of sustainable rating schemes:

- Lack of demand from the shipping industry's customers, due to low awareness of the existence of rating schemes and understanding of which ones to use and how to use them.
- Perception of the cost to industry, a financial gain is essential and must be demonstrated through initiatives.
- Critical mass in the market, it is important that initiatives are industry driven to ensure a wide engagement.
- Standardisation in the way parameters are measured, e.g. CO₂, SO_x and NO_x.
- Alignment with and between different industry sectors.

The SSI's work aims to address these challenges in order to achieve a sufficiently wide uptake of rating schemes, which will create a step change towards a more sustainable shipping industry.

What the work stream did

We have developed a web-based tool which helps cargo owners and charterers to select the rating scheme that most closely meets their needs.

We have also provided guidance on how to use ratings schemes for best effect and compiled a series of case studies that illustrate how rating schemes are already being used to inform business decisions.

Finally, we have looked forward to the future to see what the ideal rating scheme might look like, and the positive impacts this could have on the industry.

What does this mean for SSI members and the wider industry?

By providing independent guidance, this SSI work stream hopes to contribute to an increase in the uptake of rating schemes, in particular to increase demand for transparency from logistics managers and charterers. The SSI recognises the need for leadership in this area: many of the members already use rating schemes and are keen for others to adopt them.

Next steps

We are exploring how to extend the uptake of rating schemes and drive continued improvement in standards across the shipping industry.

Tools available



- A web-based guidance resource designed to assist cargo owners, charterers and ship owners in the selection of the rating scheme that most closely meets their needs.
- Guidance on how to use the rating scheme to best effect.
- A series of case studies showing how rating schemes are being used by customers, ship owners and charterers to inform business decisions.
- An outline of what the ideal rating scheme of the future could look like and how this could positively impact the industry.

individual actions

As we've mentioned, collective action is only part of the story. SSI members are pioneering industry-leading initiatives which are taking their organisations towards the SSI Vision for 2040, and we've developed a bank of case studies to highlight their work and encourage others to emulate it.

ABN Amro became the world's first bank to introduce standard retrofit clauses into the financing agreements of new ships, while CNCo has shared its story on how it insists on industry-leading health, safety and environmental standards in the ship recycling yards it uses.

Customers Unilever and AkzoNobel have ambitious sustainability strategies that are part of their core businesses, which are filtering down into decisions about shipping, and Gearbulk is driving change through its employee base. Additionally, a third of SSI members are undertaking pioneering activities focused on trialling and investing in new energy technologies. For example, Wärtsilä is working to solve cost and emission challenges in the marine sector with natural gas.

As leading organisations, the members share a number of other commitments/commonalities:

- 70% of SSI members report on sustainability in some way and have sustainability embed into their core organisational strategies.
- Two-thirds have carbon reduction targets, and nearly 60% publicly report their CO2 emissions.
- 50% use sustainability criteria as part of their procurement decisions, and almost as many engage their supply chain in their sustainability work.
- Two-thirds of the relevant members use rating schemes in ship selection.
- More than 50% now use the ISO 9000 quality management and ISO 14001 environmental management accreditations.

But we are not satisfied yet. With our Vision for 2040 as the long-term goal, we will show what sustainable leadership looks like today and reinforce our commitments to delivering it.

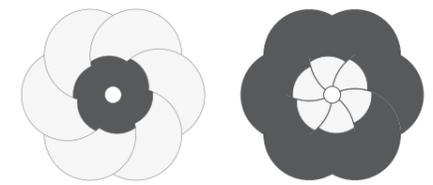
To find out more, download the bank of case studies from SSI members: www.ssi2040.org/members

This image shows which aspects of the SSI Vision our initial member case studies are contributing towards.

Key

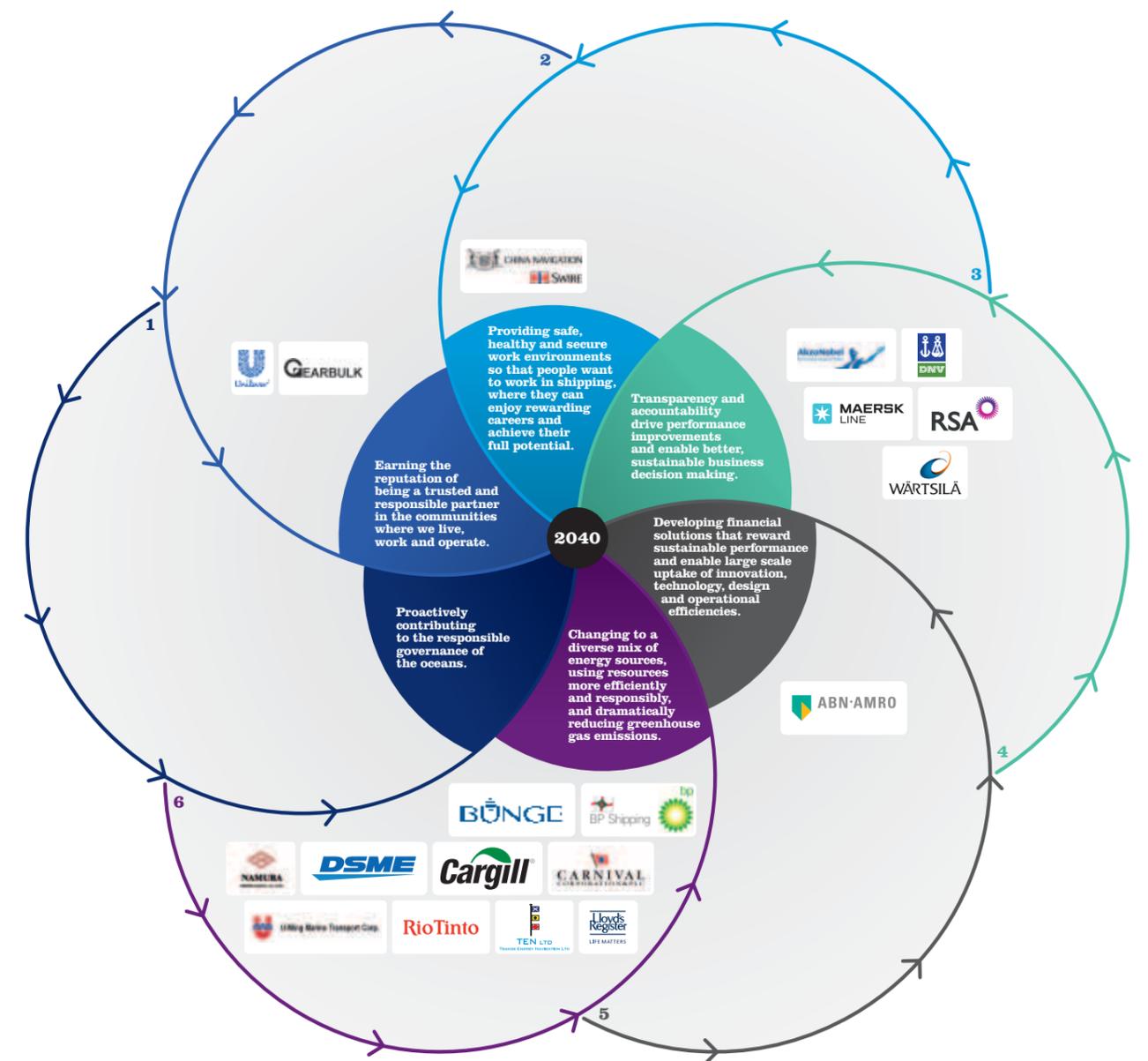
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Of course, many of the case studies cut across a number of the vision areas, we have placed the logos in the section that is most prevalent.

The initial case studies we have developed are just the first set of stories we will be producing. We plan to share more stories with the industry in the future which cut across all areas of the vision.



the next steps for the industry and the SSI

In this challenging time for the industry, the progress that has been made and the sustained commitment to the SSI's Vision for 2040 is remarkable. However, we still have a long way to go to achieve a sustainable industry.

At the start of the SSI we identified the key levers for change for the industry. These were individual leadership, market mechanisms, customer demands, regulation and technological advances. Working on practical changes, we've learnt more about the enablers and barriers of change within the industry and where we need to go next. We think there are three areas that will unlock more progress:

- **Market mechanisms and incentives that reduce risk.** When evaluating technologies that are new to shipping, like air lubrication for example, the industry needs to find ways to de-risk these investments. Better sharing of performance data, access to venture capital or seed funding, and strong market incentives are an essential part of this. However, even when the technology is more established, the industry can still be reticent about embracing and adopting it. Notwithstanding the finance that is available, the conservative nature of the industry, the lack of independent verification of performance data, and the split incentive of who really benefits from investment in new technologies, all contribute to impeding the scale of progress which is needed. Finding ways to make the rewards greater than the risks will accelerate change.

- **Better access to data and greater transparency.** A lot of the risk to adopting new approaches is about the lack of transparent performance data. Rating schemes have helped, and need wider adoption, but we also need more universal sharing of performance data, perhaps using methods like the one we developed in our closed-loop materials management work stream. Transparency is not just about technology either: social conditions in ship breaking are also under more scrutiny. Ship owners need to respond transparently to raise standards across the industry. And the industry also needs to understand the implications of emergent issues, like the pricing of ecosystem services (climate regulation, for example).
- **Greater urgency and support for a progressive approach.** The pace of change in shipping is slow. We need a stronger progressive voice for the industry that creates more urgency for regulators, governments and customers. More companies need to come together to both advocate and showcase the innovation and change that will make the industry stronger – a significant role for the SSI.

we're only just getting started

Join the newly independent SSI to help create an industry fit for the long-term.

The SSI has grown considerably to 20 members and seven knowledge partners since it was founded by Forum for the Future in 2010. We are now ramping up our ambitions by making the SSI an independent charity, led and managed by the industry members and overseen by a board of trustees. This is a significant achievement, and reflects the renewed drive by the members to catalyse a sustainable industry.

Looking ahead the SSI strategy will focus on three activities:

- Promoting individual leadership through nearer-term commitments and sharing individual action and performance widely.
- Innovation platforms that seek to tackle existing barriers in partnership with others and also identify new areas that present risks and opportunities for the industry.
- Becoming the progressive voice for the industry and scaling up the great solutions that already exist through media and communications activities.

As part of its charitable purpose, the SSI is committed to making all resources available to the wider industry.

Over the next year we will be:

- Renewing our efforts to tackle the barriers to getting new technology onto ships. We plan to experiment more with open data sharing, buyers clubs and capacity building for technology providers, for example, as well as pushing forward with a range of financing and insurance options.
- Addressing poor labour conditions and environmental standards in ship recycling.
- Delivering a piece of customer engagement that incentivises sustainable practices.
- Selectively influencing progressive standards and regulation towards the Vision for 2040.
- Publishing an annual trend tracker that will allow the wider industry to keep on top of future risks and opportunities.
- Delivering shared leadership commitments and inviting more leaders to join us.

We will also be updating and sharing our road map to the Vision for 2040.

We will share our progress on a regular basis, culminating in the next industry-wide report in 2015.

If you want to get involved
in the SSI, or want to find
out more:

W: www.ssi2040.org

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