



*2016 ANNUAL RESULTS
STRATEGY & OBJECTIVES*

A unique technology to upgrade maritime transport oil residues into new fuels and light bitumen

Contents

1

Presentation

2

2016 key facts and financial results

3

Outlook

Ecoslops: key facts



2008
Pilot in Malta

Development of Sines
Signing of Marseilles agreement

2016



2013
Start of the construction of the industrial unit at Sines

Launch of Marseilles project
Agreement of a Letter of Intent for Suez Canal region
Sines ramping up

2017

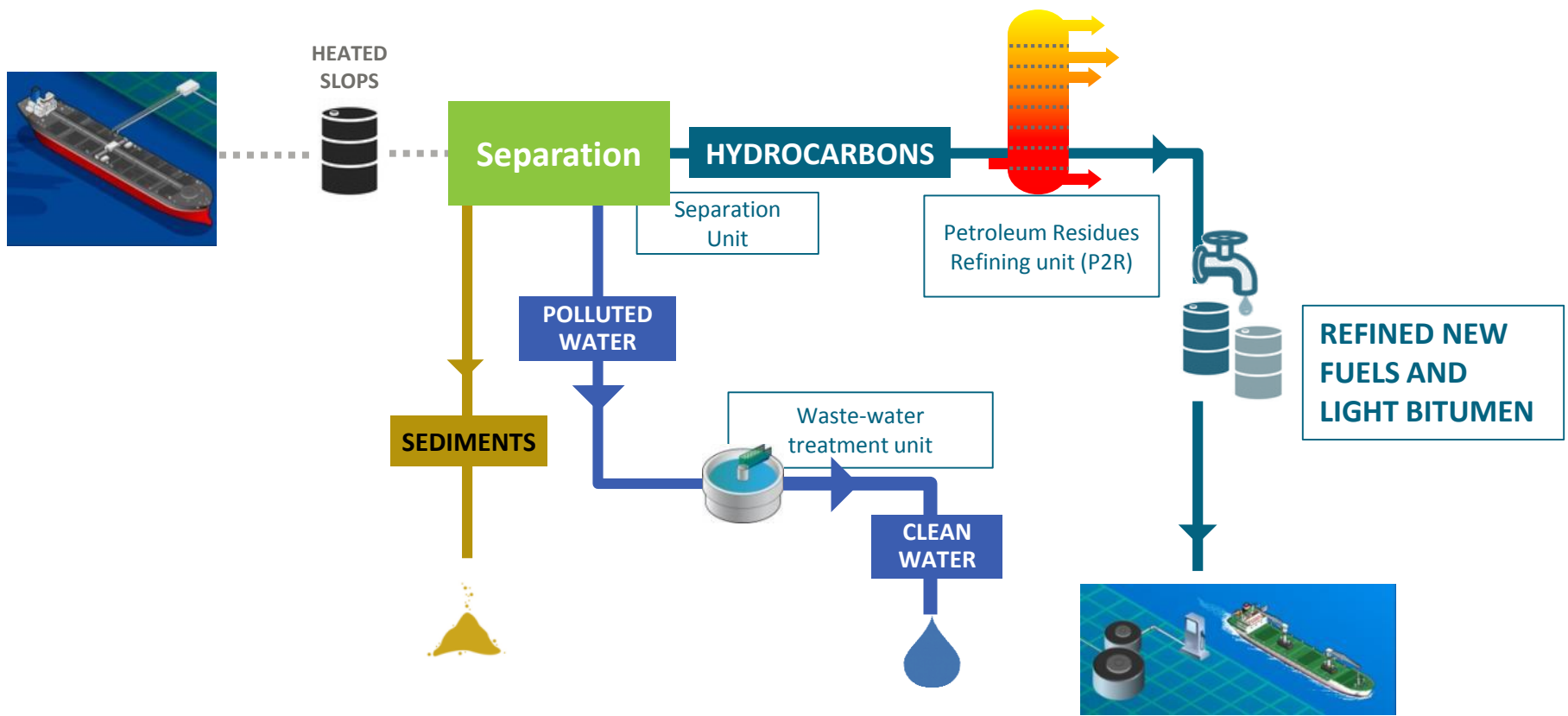


Start-up of Sines
Initial Public Offering
First sales of products

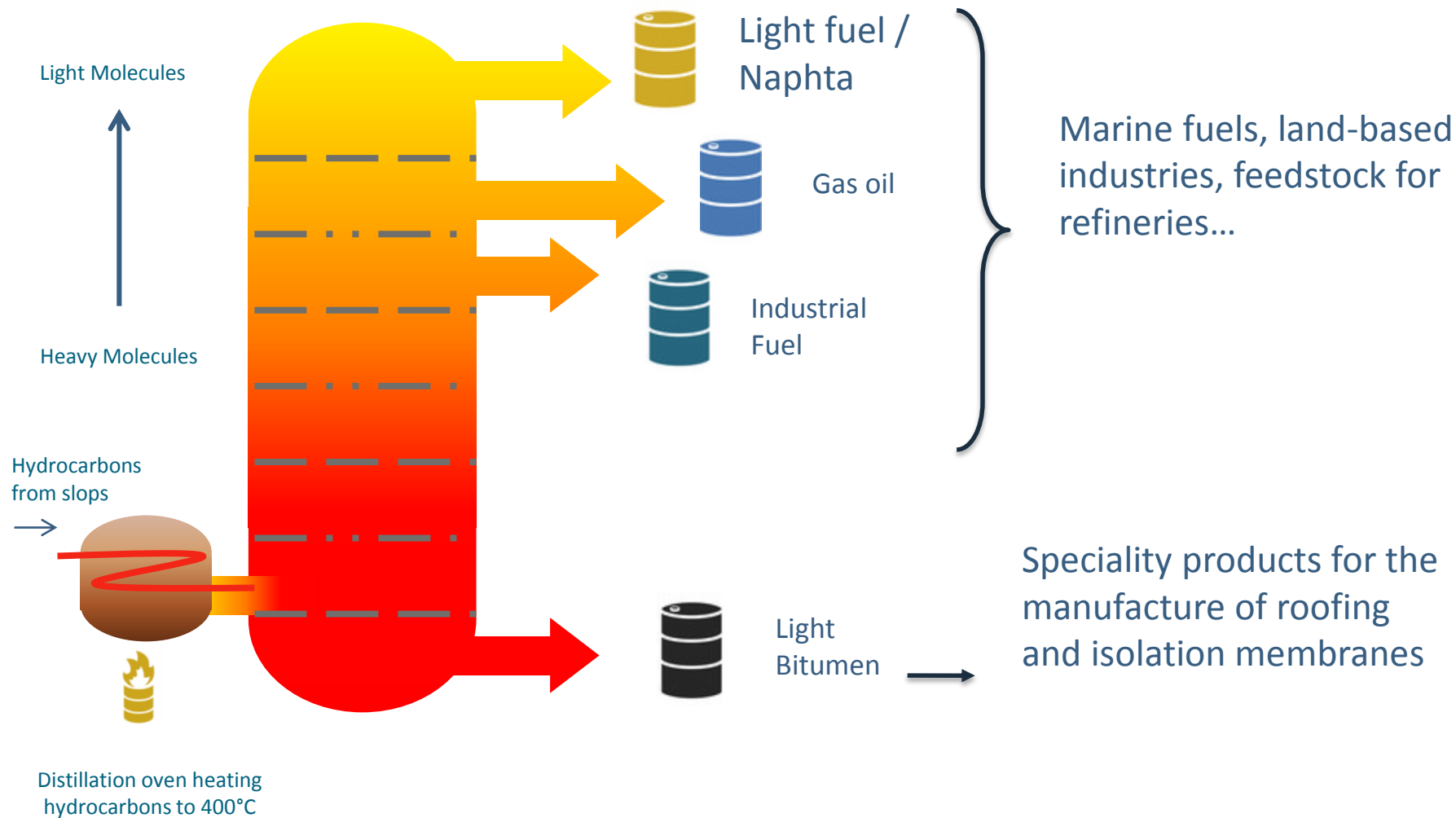


2015

The P2R column: a real micro-refinery



A process which allows 98% of processed slops to be sustainably regenerated and sold back into markets



A high-growth market

Steady growth in petroleum residue volumes

- **Steady growth of maritime traffic**
- Ships use **Heavy Fuel Oil (70% of fuels)** or **Marine Diesel Oil - MDO** : more expensive

Tighter regulation (MARPOL)

- **Fines are increasingly imposed, and rising** (*40m\$ imposed on a cruise line in Dec.2016*)
- **Surveillance drones are deployed to coastal regions** (*European Union*)
- **Yet the amount of voluntary pollution in European seas alone is estimated to reach 3,000 incidents per year**

Collecting and treating slops : a regulatory duty for port authorities



Ban on waste deposits in the sea



Mandatory collection at ports

Many ports do not comply with the regulations and need to be equipped

Low valuation of these products (heat capacity)

Sines: the first operational industrial site since 2015 and ramping up



Sines



A strategic location

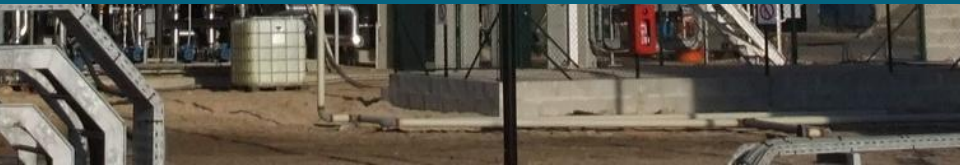
- Number 1 Portuguese port in terms of volume
- Located on a major sea route
- Deep-water port
- Oil terminals around Galp and Repsol
- Container-ship terminal
- Regional hub of MSC (2nd largest global ship-owner)

Exclusive rights for the collection of petroleum residues for 15 years within the sub-concession agreement signed in 2012 with the port authorities

Treatment capacity: 30,000 tons per year



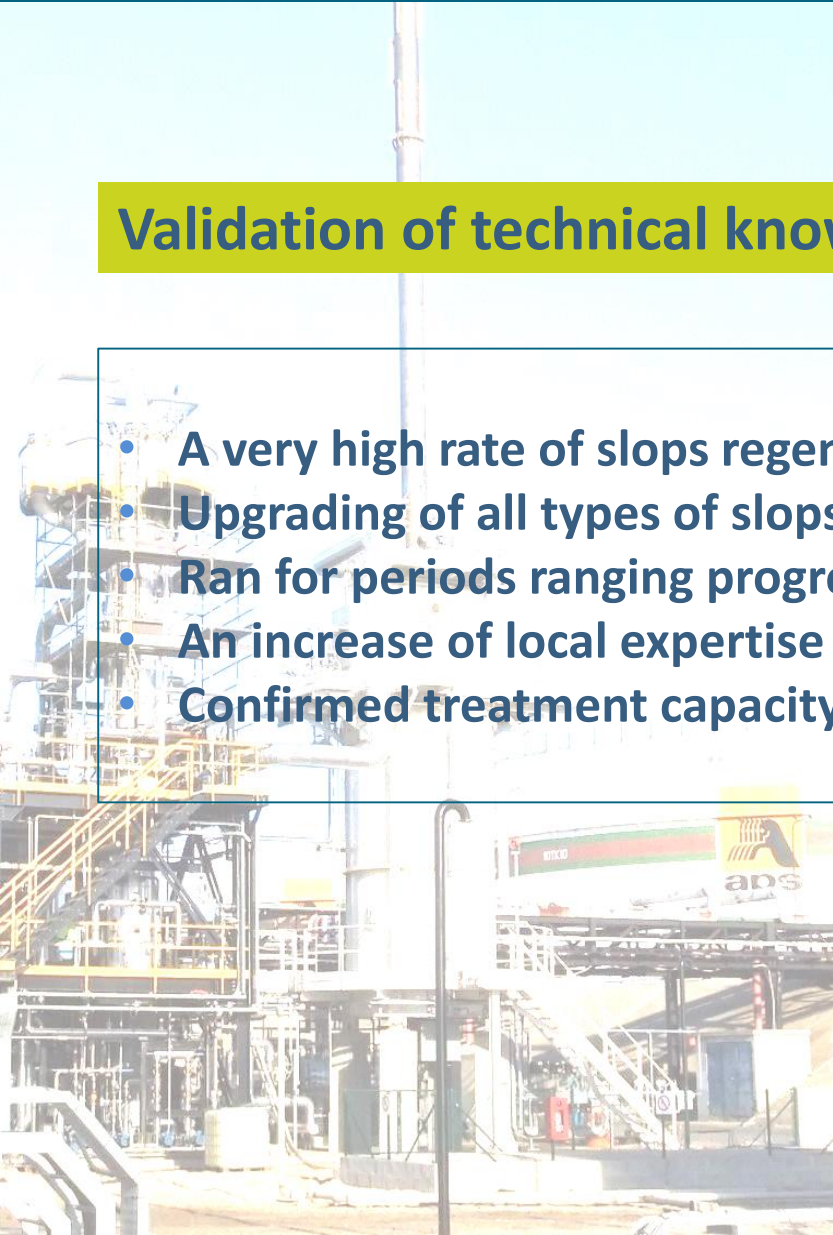
2016 - Key facts and financial results



2016, a year rich with success

Validation of technical knowledge

- A very high rate of slops regenerated into commercial products: 98%
- Upgrading of all types of slops (*High and low flash point*)
- Ran for periods ranging progressively from few weeks to several months
- An increase of local expertise
- Confirmed treatment capacity of 3,000 tons/month



2016, a year rich with success

Commercial success

- **More customers than available products**
- **Confirmed quality of the end-products** (*successful registration of products*)
- **Multi-annual sales contracts with main groups, at international standards**

2016, a year rich with success

Productivity measures

- Reduction of fixed costs of about 25% in a full year (*staff and other expenses*)
- France and Portugal
- A rapid experience curve in Sines
- A local base of expertise valuable for future site

2016: confirmation of the pertinence of the business model

Confirmation of technical ability

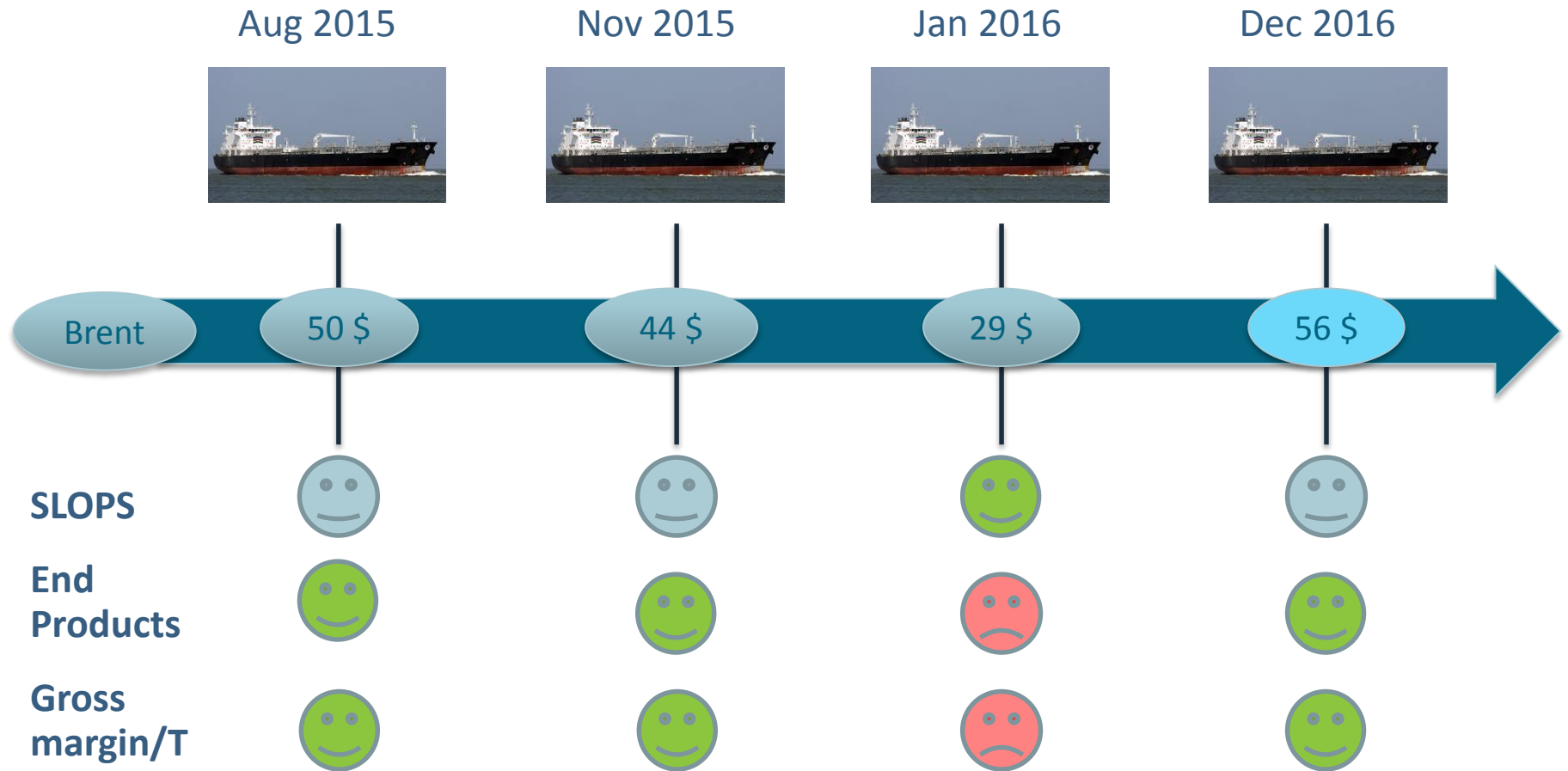
Commercial success

Productivity measures



PERTINENCE OF THE BUSINESS MODEL

Strong resistance to the Brent price volatility



Ecoslops: Portugal in 2016

- Increase by 10% of sub-concession revenues, in line with the port activity
- Oil revenues: represent 50% of revenues in 2016
- 17kt of slops treated and 13kt sold (2.5kt self-consumed)
- Mix and sale price with strong potential of improvement in 2017

| <i>Turnover (M€)</i> | 2016 | | 2015 | | Var |
|----------------------|------------|-------------|------------|-------------|------------|
| Steam | | | | | |
| Water | | | | | |
| Utilities - air | | | | | |
| Utilities - effluent | 2,2 | 50% | 2,0 | 86% | 10% |
| Services | | | | | |
| Vessels | | | | | |
| Lightfuel | | | | | |
| MDO | | | | | |
| Fuel nº 3 | 2,2 | 50% | 0,3 | 14% | 558% |
| XFO | | | | | |
| Total | 4,4 | 100% | 2,3 | 100% | 89% |

Profit and loss account

2016: performance improvement

- High increase in operating revenues
- More than 50% of the revenues stem from the micro-refining unit(17,000 tons treated)
- Controlled operational costs
 - €1.8 M of central costs (Ecoslops France), dedicated to development vs. €2.2M in 2015
 - Adjustment of fixed production costs in Sines
- Net result improved by €2.4M

| <i>in M€</i> | 2016 | 2015 | Var. |
|--|-------------|-------------|-------------|
| Sales revenues | 4.2 | 2.3 | +1.9 |
| Other products | 0.2 | 0.4 | -0.2 |
| Gross margin | 3.1 | 2.0 | +1.1 |
| Operating expenses (excluding amortization) | -6.0 | -6.7 | +0,7 |
| <i>of which France</i> | -1,8 | -2,2 | +0.4 |
| <i>Sines</i> | -4.2 | -4.5 | +0.3 |
| EBITDA | -2.9 | -4.7 | +1.8 |
| Depreciation | -1.1 | -1.6 | +0.5 |
| EBIT | -4.0 | -6.3 | +2.3 |
| Financial result | -0.3 | -0.2 | -0.1 |
| Income taxes | 0.9 | 0.7 | +0.2 |
| Net result | -3.4 | -5.8 | +2.4 |

Balance sheet

- Ecoslops financial structure has been consolidated in 2016 by the issuance of ORNANE (€5.5€) and the partial exercise of share warrants
- The cash position, at the end of December, allows the commencement of the Marseilles project start-up and to finance the preliminary studies of other projects

| ASSET (net) <i>in M€</i> | 2016 | 2015 | Var. |
|------------------------------------|-------------|-------------|-------------|
| Fixed Asset | 18,3 | 19,1 | -0,8 |
| Differred tax assets | 1,8 | 1,0 | +0,8 |
| Net fixed asset | 20,1 | 20,1 | 0,0 |
| Raw materials | 0,4 | 0,9 | -0,5 |
| Receivables | 0,9 | 0,7 | +0,2 |
| Cash | 4,3 | 1,6 | +2,7 |
| Other | 1,3 | 1,5 | -0,2 |
| Net current asset | 6,9 | 4,7 | +2,2 |
| Total asset | 27,0 | 24,7 | +2,3 |
| LIABILITIES <i>in M€</i> | 2016 | 2015 | Var. |
| Capital, reserves, share premium | 15,7 | 19,7 | -4,0 |
| Net result | -3,4 | -5,8 | +2,4 |
| Shareholders equity | 12,3 | 13,9 | -1,6 |
| Conditional advances | 5,5 | 5,9 | -0,4 |
| Convertible bond | 5,5 | | +5,5 |
| Borrowing and financial debts | 1,6 | 2,7 | -1,1 |
| Suppliers and tax debts | 1,8 | 2,0 | -0,2 |
| Other | 0,3 | 0,2 | +0,1 |
| Total debts | 14,7 | 10,8 | +3,9 |
| Total liabilities | 27,0 | 24,7 | +2,3 |

Cash flow 2016

- Strong reduction of cash requirements thanks to increase of sales
- Working Capital is under control
- Holding Cash expenses: approx. €1.3M i.e. 40% of 2016 cash generated by operations

| <i>en M€</i> | 2016 | 2015 |
|---------------------------------------|-------------|--------------|
| Capacité d'autofinancement | -3,0 | -4,7 |
| Variation du BFR | 0,1 | -3,6 |
| Acquisition d'immobilisations | -0,4 | -2,9 |
| Cash Flow Libre d'Exploitation | -3,3 | -11,1 |
| Nouveaux emprunts | 4,8 | 0,0 |
| Souscription capital | 1,9 | 14,5 |
| Remb. Emprunts | -0,5 | -2,1 |
| Remb. Subventions | -0,3 | 0,0 |
| Autres | 0,1 | 0,0 |
| Flux de trésorerie | 6,0 | 12,4 |
| Variation nette de trésorerie | 2,7 | 1,3 |
| Trésorerie d'ouverture | 1,6 | 0,3 |
| Trésorerie de clôture | 4,3 | 1,6 |



Outlook

Outlook 2017: Sines

- **Continuing increase of production with a 25,000 treated tons/year objective in 2017**
- **Sale of gas oil to different customers** (*increase of average selling price per ton*)
- **Further decrease of costs** (*full year reduction of €600k*)
- **Operating profitability** (*EBITDA >0*)

Outlook 2017: Corporate

- **Strengthening of teams, notably in Business Development**
- **SG&A under control**

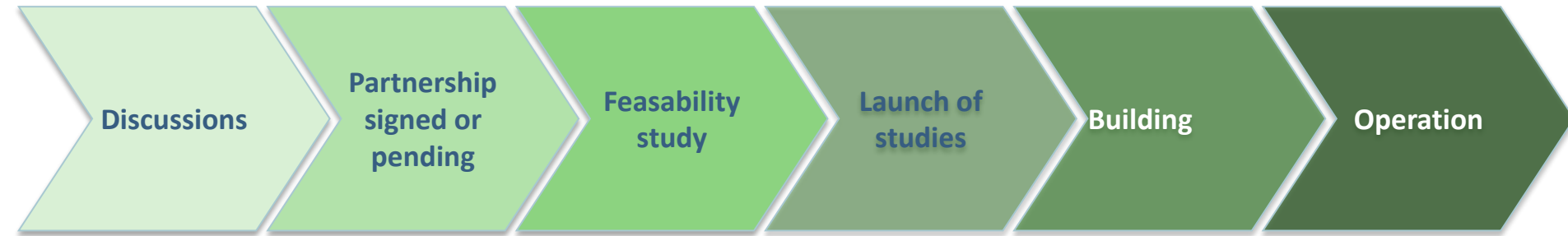
Marseilles Total project

- **Preliminary agreement signed with Total in September 2016**
- **Feasability study finalised**
- **Firm agreements to be signed in April 2017**
- **Building permit submitted mid-2017**
- **Objective: operation to begin at the end of 2018**
- **Capex: approx. €13M**

Marseilles Total project



A strong project portfolio



- USA
- South Africa
- Arab Emirates
- Japan
- Singapore
- Morocco

- Egypt
- Oman
- ARA zone

- Marseilles

- Sines

Share price evolution (*)



(*) since IPO

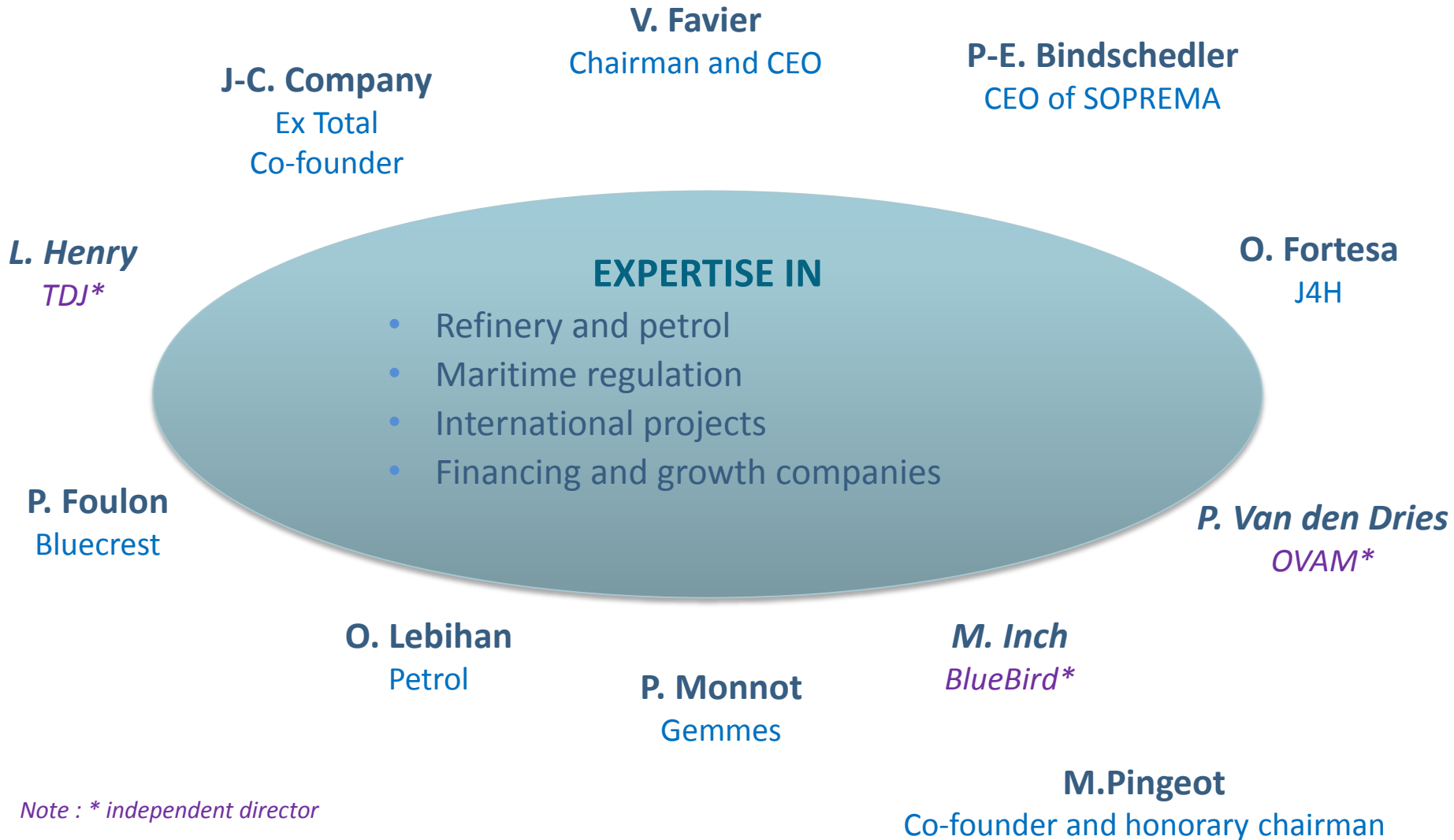
Ecoslops stock

- **Outstanding number of shares** (*as of end of February 2017*): **3,337,690**
- **Number of shares traded in 2016: 712,458 shares, i.e. 2,772 shares / day** (*source Euronext*)
- **High/Low 2016: €5.39 / €11.60**
- **Analysts**
 - CM CIC- Jean-Luc Romain*
 - Invest Securities Laurent Wilk*
 - AlphaValue – Marzio Foa*
- **Liquidity contract: CM-CIC**



ANNEX

Board of directors



Note : * independent director



Sustainable slops disposal for ports

29 Mar 2017

In March 2016, the European Sea Ports Organisation (ESPO) released its priorities for the year ahead, with port waste ranking fifth on the list. This high ranking highlights the difficulties many ports have in finding an effective and sustainable solution for slops disposal, writes Vincent Favier, CEO, Ecoslops.

The priority list for 2017 is expected shortly and port waste is likely to reappear on the list. However, this doesn't need to be the case. Innovation and developments in clean technologies means that there are now cost-effective and environmentally beneficial solutions for ports when it comes to the sustainable disposal of slops.

Slops and sludges

But what are slops and why have slops become an issue for the maritime sector? Slops and sludges are hydrocarbon-rich industrial waste, produced in engine rooms through the purification of fuels, bilge waters from mechanical systems and oily ballast water and tank cleaning waters from tankers. All operating vessels generate them, leading to an estimated 98 million tonnes of slops being produced by the global commercial fleet each year.

Currently, approximately 90% of world trade is carried by the shipping industry. The International Chamber of Shipping (ICS) estimates that in 2015, this represented around 10 billion tonnes of seaborne trade. By 2030, it is estimated that this will reach closer to 17 billion tonnes. The demands on the global fleet are therefore rising, and as the role of the shipping industry increases so will the amount of industrial waste produced. With ports already struggling, the urgency for implementing a solution is reaching new heights.



At the end of the distillation process several fuels are produced, including naphtha, fuel (GO and IFO) and light bitumen

In previous years, slops were collected from ports without issue, but this is no longer the case. Low crude prices are creating an overflow of slops within the shipping industry. Before the crude price dropped, the construction sector would provide a consistent market for slops collectors to sell to. Now, cheaper crude prices have encouraged these markets to purchase purer, virgin fuels instead, meaning that the traditional market for slops has diminished.

Slops are therefore building up in ports, many of which lack adequate reception facilities to deal with the increasing demand. Legally, vessels are required to dispose of their slops before they disembark, however they often lack the tank capacity to keep the waste products on board. If the reception facilities at the port of berth are full, then there can be significant issues with the discharge of the waste, potentially damaging the reputation of the port, and also creating environmental and sustainability issues within local port areas and communities.

Micro-refining technology

This is the vicious cycle that Ecoslops set out to disrupt with its innovative micro-refining technology. It is the first company to develop a technology capable of sustainably regenerating slops into valuable new fuels and light bitumen, which can then be sold back into the market to create a sustainable slops disposal cycle.

Based on a micro-refining process, the technology works in the following way: Firstly, to optimise distillation, the slops are pre-treated. They are heated, decanted and using high-speed vertical centrifugation, the water, hydrocarbons and sediments are separated before the refining and distillation process. As the reprocessing of the water from the slops is fully integrated within the treatment process, the water is then depolluted using the latest techniques.

The water is returned to its natural environment in line with relevant environmental laws. After the water and sediment are removed, the slops are sent to the P2R vacuum distillation column, where they are heated. Under vacuum conditions, the hydrocarbons and heavy molecules are vaporised and at the end of the distillation process several fuels are produced, including naphtha, fuel (GO and IFO) and light bitumen.

There are various benefits for ports when a micro-refinery plant is installed in the vicinity. Firstly, it removes the hassle of disposal, with all slops going directly to the plant for regeneration. This minimises port pollution, with the slops being treated as opposed to burned, and therefore helps the port boost its environmental profile. At a time when sustainability is seen as an enormous added value by a growing proportion of ship owners, operators and charterers, this can make a tangible difference to a port's competitiveness.

Port of Sinès

Proving this business model, Ecoslops established its first micro-refinery at the Port of Sinès. In 2012, Ecoslops won the tender to construct this first refinery and secured a 15-year sub-concession agreement for the exclusive rights to collect slops, but also solid waste within the port.

Since operations began, the unit has proven its industrial efficiency by recycling and upgrading over 98% of the hydrocarbon residue collected. The micro-refinery has been going from strength to strength and it is now on course to reach its target of regenerating 25,000 tonnes of slops by the end of 2017, rising to 30,000.



- Home
- News
- Directory
- Events
- Latest Jobs
- About Us

Home » News » Energy & Technology » Sustainable slops disposal for ports

Since establishing itself at the Port of Sinès, Ecoslops has developed partnerships with ship owners, notably MSC, that call in the port to discharge their slops. The quality of service provided by Ecoslops, as well as the competitive prices offered, have enabled the amount of slops collected each month to grow from 400 metric tonnes (dehydrated) to more than double that figure today. This demonstrates that Ecoslops can substantially boost the collection of local slops due to the proven viability of its business model, and proves that implementing this model on a widespread basis will serve to drive the sustainable disposal and regeneration of slops across the shipping industry.

Following the success of the Port of Sinès operation, and validation of the technology, there is real enthusiasm within the industry to increase the sustainable treatment of slops. Indeed, port authorities are seeing it as a genuine solution to their infrastructure challenges and a point of competitive differentiation.

Since the opening of the facility in the Port of Sinès, more than 15 delegations from various European and non-European ports have visited the site to better understand the technology's potential. In April 2016, Ecoslops was awarded the Future Programme's Worldwide Innovation Challenge by the French government to continue the development of the technology.

Port of Marseille

Building on this success, Ecoslops signed a Memorandum of Understanding (MOU) with Total, the international oil and gas company, in September 2016. The MOU is to establish a slops processing plant within the refinery in La Mede, Marseille. The aim of this unit will be to process slops unloaded in the Port of Marseille and in neighbouring ports.

Commercial contracts have also been signed with a number of clients, including large Portuguese and international groups, such as Soprema and EDP, further evidence of Ecoslops' technological capacity and the quality of the production.

Most recently, Ecoslops has signed a Letter of Intent (LOI) with EGPC (Egyptian General Petroleum Corporation), through its subsidiary SSCO, in order to explore the feasibility of creating an oil residue collection and recycling plant in the Suez Canal region.

The feasibility study will explore the potential for slops collection and recovery services that could be installed and then used by ships passing through the canal. The company recently reconfirmed its ambition to sign another new project contracts by the end of 2017, bringing the balance to three projects including Marseille and Egypt.

Increasing need

The significant slops disposal challenge that the shipping industry currently faces is not without solution. The development and implementation of new technology is transforming all areas of the environmental impact of the shipping industry, including slops disposal.

As the global shipping industry's tonnage increases in volume and the difficulties facing slops disposal continues, the need for a sustainable solution in each port will become ever more pressing. The eradication of this issue was one of the core reasons for Ecoslops' formation. The development, proven validation and tangible success of its micro-refining technology is now recognised as a viable, commercial and sustainable solution for the disposal of slops, benefiting ports, ship owners and operators as well as traditional slops collectors.

Furthermore, it is representative of the increasing movement within shipping and ports where advanced technology and innovation is viewed as the most effective way to overcome the sustainability challenges that the industry faces.



December 2106

Embracing innovation as the solution to the growing 'slops challenge'. By Vincent Favier

With estimates of illegal slops disposal reaching at least 3000 incidents each year in European waters alone, according to The United Nations Environment Programme (UNEP), the scale and environmental impact on a global basis could be massive. Reports of illegal waste dumping are prevalent in the industry press, and while perpetrators are being fined and charged, the number of cases is not diminishing. Large scale, heavily polluting cases of oil spills are well documented, but it is the smaller spills, often going under the radar, which are causing unknown damage.

The International Maritime Organization's (IMO) MARPOL Convention 73/78 was adopted in the 1970's to prevent pollution of the marine environment by ships – from operational or accidental causes – and while many ship owners dispose of their slops in accordance with this legislation, and also the European Directive 59/2000 regulation, a minority do not. Indeed two recent high-profile slop dumping incidents have resulted in crew facing felony charges and have left the companies with significant fines, reaching up to \$1,000,000.

Slops and sludges are a hydrocarbon-rich industrial waste, produced in various parts of a ship's operations, including tank cleaning, purifying fuels and using ballast water. They are an unavoidable waste product of all voyages.

The volume of slops and sludges a vessel produces depends on its operations, the size of the vessel, its maintenance and age, as well as various other factors.

This waste material is considerable: the global fleet uses an estimated 350 million tonnes of fuel oil to function every year. This results in an estimated tens of million tonnes of slops generated each year, all of which needs to be disposed of in line with strict regulations, to ensure minimal impact on the environment.

Disposing of slops sustainably has not been without its challenges. The recent low cost of crude oil has encouraged markets such as the construction sector – a traditionally reliable market for slops collectors to sell to – to invest in purer, virgin fuels. Without this channel, disposing of slops has become more difficult, and more expensive. Crucially, there is also now a significant build-up of slops in ports with many port authorities not having the adequate reception or collection facilities to manage them, and tanks are becoming physically full. The situation is interrupting shipping operations in ports, causing downtime, as well as creating environmental and sustainability issues within local port areas and communities.

To provide a viable solution to this mounting issue, Ecoslops has developed a unique technology to sustainably regenerate slops into valuable new fuels and light bitumen, which can be sold back into the market, creating a sustainable cycle.

Based on a micro-refining process, the technology works in the following way: firstly, to optimise distillation, the slops are pre-treated. They are heated, decanted and using high-speed vertical centrifugation, the water, hydrocarbons and sediments are separated before the refining and distillation process. As the reprocessing of the water from the slops is fully integrated within the treatment process, the water is then depolluted using the latest techniques. The water is returned to its natural environment in line with relevant environmental laws. After the water and sediment is removed, the slops are sent to the P2R vacuum distillation column, where they are heated. Under vacuum conditions, the hydrocarbons and heavy molecules are vaporised, and at the end of the distillation process several fuels are produced, including naphtha, fuel (GO and IFO) and light bitumen. This technology provides a solution at every level of the slops disposal chain. It helps ports to improve their sustainability profile, reduce the environmental impact within their local community, as well as enhance their competitiveness and reputation. As the waste from the vessels is being appropriately treated, and at a good price, ship owners can also improve their reputation by creating a sustainability cycle for their slops with the regenerated product being sold back into the market. Traditional slops collectors also benefit, as Ecoslops purchases the product at a fair price, and alleviates the pressures on storage capacity.

Over 17,000 tonnes of slops have been successfully regenerated into fuel oil and sold back into the fuel supply chain since Ecoslops' first micro-refinery in the Port of Sinès commenced industrial production in 2015. Ecoslops has also announced that it is on track to meet its annual target of producing at least 30,000 tons of regenerated slops in 2017 from the Port of Sinès. In September 2016, Ecoslops signed a Memorandum of Understanding with Total, the international oil and gas company, to establish a slops processing plant within the refinery in La Mede, Marseille, further validating the viability of the technology and Ecoslops' business model. The aim of this unit will be to process slops unloaded in the Port of Marseille and neighboring ports. In conjunction with this, Ecoslops has continued to develop other projects, particularly in Northern Europe, and is reiterating its objective of signing deals for three new sites by the end of 2017.



With shipping's sustainability profile, and impact on climate change as well as other environmental issues under real scrutiny, the problem of illegal waste disposal is an issue that the industry needs to address urgently. The unknown quantity of the pollution caused cannot be ignored, and sustainable solutions are now available to help tackle this problem. Only through new innovations, such as Ecoslops'

technology, can we make the legal and sustainable disposal of slops more attractive to ship owners and operators, and tackle the numerous smaller-scale, deliberate spills that don't receive media attention. The issue is now being recognised within the industry, and with support from majors such as Total, real progress is being made to combat this environmental threat.

ECOSLOPS has developed a unique technology to transform oil residues from shipping (slops and sludge) into new recycled marine fuels. The Company's ambition is to establish itself as major player in the treatment of marine hydrocarbon waste. The ECOSLOPS solution is based on a perfect knowledge of the processes of collection, treatment and recycling of slops and sludges. ECOSLOPS offers an economic and ecologic solution to port infrastructure, waste collectors and ship owners through industrial scale treatment unit they develop and operate. The first industrial unit is based in Sinès in Portugal.

<http://www.ecoslops.com/en/>

GREEN4SEA

The solution for sustainable slop disposal is here - shipping needs to grasp it

In Expert Views 21 December 2016



The issue of slops disposal has recently gained increased international attention. In March 2016, the European Sea Ports Organisation (ESPO) placed port waste and ship waste as its fifth and sixth biggest priorities for the year ahead, and it's not hard to see why. Large scale oil spills continue to encourage media headlines, reporting on the negative impact on the local environment, as well as the significant fines imposed; the recent \$40 million penalty due from a high profile cruise line for illegally dumping slops being a case in point.

However, what many remain unaware of is that numerous smaller spills occur on a daily basis. Though the environmental impact is less, collectively they all add up. While some of these spills are accidental, caused by a problem with equipment or a vessel grounding, many are deliberate. In fact, the United Nations Environment Programme (UNEP) estimates that at least 3,000 incidents occur each year in which oily waters are deliberately discharged into European waters. When solutions for sustainable slop disposal are available, this deliberate discharge of oily waste is clearly unacceptable and unnecessary.

Slops and sludges are a hydrocarbon-rich industrial waste, produced in various parts of a ship's operations, including tank cleaning, purifying fuels and use of ballast water. How much oily waste each vessel produces depends on its operations, the size of the vessel, its maintenance and age, as well as various other factors.

An estimated 90 per cent of the world's goods are transported by ships, using a combined 400 million tonnes of fuel oil to function per year. The resulting waste material is substantial.

MARPOL Convention 73/78 and European Directive 59/2000 regulations have been put in place to safeguard the environment against this waste, however as we have seen, these rules are not always adhered to. As well as the record \$40 million penalty, there has also been two other high profile slops dumping cases brought to court, which have hit the maritime headlines. The resulting charges have left the companies with significant fines, reaching up to USD\$40,000,000, and crew facing felony charges for their part in the illegal discharge.

It would appear that the hard economic and commercial times the shipping industry is experiencing are forcing ship owners and operator's hands when it comes to slops disposal. In more prosperous times, the construction sector provided a consistent market for slop collectors to sell to. The recent low cost of crude oil has encouraged these markets to invest in purer, virgin fuels. Slops are therefore building up in ports, many of which do not have adequate reception facilities to deal with the build-up, and their slops tanks are becoming physically full. Vessels still have to dispose of the slops, but they do not have the tank capacity or indeed the desire to keep the waste product on board.

To combat this, Ecoslops is the first company to develop a unique technology to sustainably regenerate slops into valuable new fuels and light bitumen, which can be sold back into the market, creating a sustainable cycle.

2017 financial calendar

- **13 June 2017: General Shareholders' meeting**
- **27 September 2017 : half-year results**

Investor conferences

- *Conference Oddo Forum, 5 January, Paris*
- *Conférence MidCap Portzamparc, 21 March, Paris*
- *Small Cap Event CF&B, 18 et 19 April 2017, Paris*
- *Clean Tech SFAF, 23 May 2017, Paris*



Thanks for your attention