

Value2Society™

Becoming A More Valued & Valuable Company

DryLog Ltd

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In collaboration with



The gap between what markets value and what society values is closing. Financial markets and investors are increasingly focused on the fact that risks and opportunities linked to sustainability are tangible and can have a significant impact on business performance. For many business leaders sustainability, or a more balanced perspective on stakeholder value, is a management mantra that is overtaking the singular focus on maximisation of shareholder value. Delivering on the new mantra can present challenging trade-offs, in particular for resource allocation.

Value2Society™, if used effectively, can assist DryLog make trade-offs in a more objective manner as we seek to pursue becoming a more valued & valuable company.

Introduction

DryLog Ltd owns or operates under long-term charters a fleet of 37 bulk carriers, transporting 'dry bulk' commodities – from soya beans to potash to iron ore to coal – from port to port, globally – from Odessa to Santos to Muara Berau.

DryLog is therefore part of the Maritime Transport Industry, which is responsible for the movement of 90 per cent of the world's traded goods, 30 per cent of which are dry bulk. This global distribution is achieved by a world fleet, in 2019 comprising 51,664 vessels with a capacity of 1.97 billion dead weight tons (dwt) representing 2.61 per cent annual growth, the slowest growth in a decade.

Five countries own more than half of the world fleet, namely, Greece, Japan, China, Singapore and Hong Kong (China). Greece continues to dominate ownership representing 17.79 per cent of the total, followed by Japan at 11.47 per cent. Assuming the average vessel dwt equals 59,000, Dry Log's activities represent

utilisation of 0.5 per cent of Greece's total fleet and 0.08 percent of the world fleet.

Today, the Maritime Transport Industry is undergoing a significant transformation, shaped by: more regionalised trade flows; the increasing role of technology in logistics; intensified and more frequent climate related disruptions and an **accelerated sustainability agenda**.

This Value2Society™ report (with supplementary materials¹) will help DryLog address these growing sustainability challenges. This is achieved through the comprehensive assessment and evaluation of DryLog's annual societal impacts (or 'sustainability performance'). The Value2Society™ approach also offers a benchmark to how other maritime transport companies could report on their contribution to making our industry and the societies we serve more sustainable. Through widespread industry adoption the Value2Society™ approach can further cement Greece's vanguard standing within maritime transport.

The essence of Value2Society™ is 'impact' – quantifying the positive and negative impacts of annual operations and translating these impacts into respective economic costs and benefits. The value translation enables impact magnitude comparison (e.g. impact of air pollution versus impact of water discharges) and a net impact 'baseline position' to be determined, permitting clear performance comparisons over time and against peers.

Value2Society™ therefore provides a natural 'materiality' lens to the more familiar approaches to sustainability reporting, enabling: prioritisation of interventions through clear understanding of trade-offs; indication of the current societal costs likely to become real financial costs; and a robust evidence base to engage 'impact investors' of the Green / Sustainable Finance community.

¹ File: R2_EXT_DryLog-V2S-Report_20210324

Scope

This analysis has three dimensions: (i) Quantifying the Value2Society™ (net societal impact) of DryLog’s direct operations; (ii) Comparing components of our direct Value2Society™ against peers; and (iii) Understanding a portion of the Value2Society™ we ‘enable’ through our transportation of commodities.

The direct operational analysis relates to DryLog’s 2019 ‘shore side’ (Athens Headquarters) and ‘ship side’ operations of the eleven vessels we outright own and operate. The intention is to extend the analysis to the remaining 26 vessels once underpinning methodologies and the initial results are better understood by our wider team. The analysis comprises performance across 25 impact indicators of which 15 are used to benchmark our performance against four peers.

The ‘enabled’ analysis comprises two case studies, concerning the net societal impacts

of the commodities we ship, specifically coal and grain.

The Maritime Transport Industry is an intrinsic component and vital enabler of commodity value chains. Appreciating the wider societal impacts of commodity production and consumption is therefore central to DryLog’s understanding of the totality of our Value2Society™, and from this ‘**impact vantage point**’ central to also our future business strategy & stakeholder engagement.

Results – Direct Operations

The annual Value2Society™ of DryLog’s direct operations equals **€3.82 million**. **Figure 1** below represents this result in waterfall chart form and shows the significant proportion is understandably generated from the ship-side operations (shaded blue) versus shore side operations (shaded green)

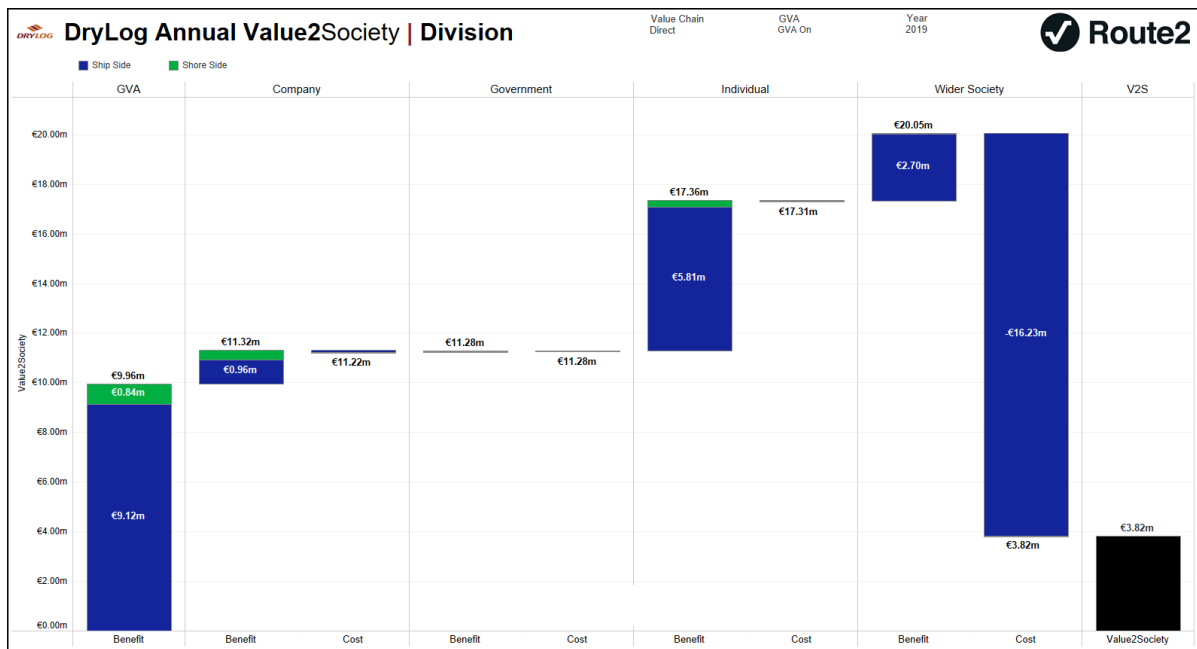


Fig 1: Value2Society™ Waterfall - Divisions

The waterfall chart builds from the conventional measure of societal contribution – Gross Value Added (GVA) as represented in the far left column. GVA embodies the value of jobs supported, taxes paid and the profits returned to owners. Therefore, GVA captures the value of

returns to the conventional factors of production and equal to **€9.96 million**.

To this GVA base, the negative and positive impacts to our ‘company’ and external stakeholders (government, employees & wider society), resulting from our direct operations, are introduced to yield a more

comprehensive measure of contribution – Value2Society™ – as represented in the far right column.

Therefore, the net, of these previously unmeasured impacts of direct operations, are negative and equal a cost of **€6.14 million**. The key driver of the net negative impact concerns the release of air pollutants, greenhouse gas emissions, blackwater generation and other operational discharges.

Figure 2 provides a further waterfall representation, illustrating the stakeholder impacts by capital type – Financial, Human, Intellectual, Manufactured, Natural and Social Capital. This ‘6-Capital’ formulation of sustainability performance is increasingly common, as it acknowledges the asset base for operations is broader than that reported in the balance sheet of financial accounts. The penultimate column of Figure 2 (reading left to right) captures the aforementioned environmental impacts and their costs (financial and well-being related) incurred by wider society.

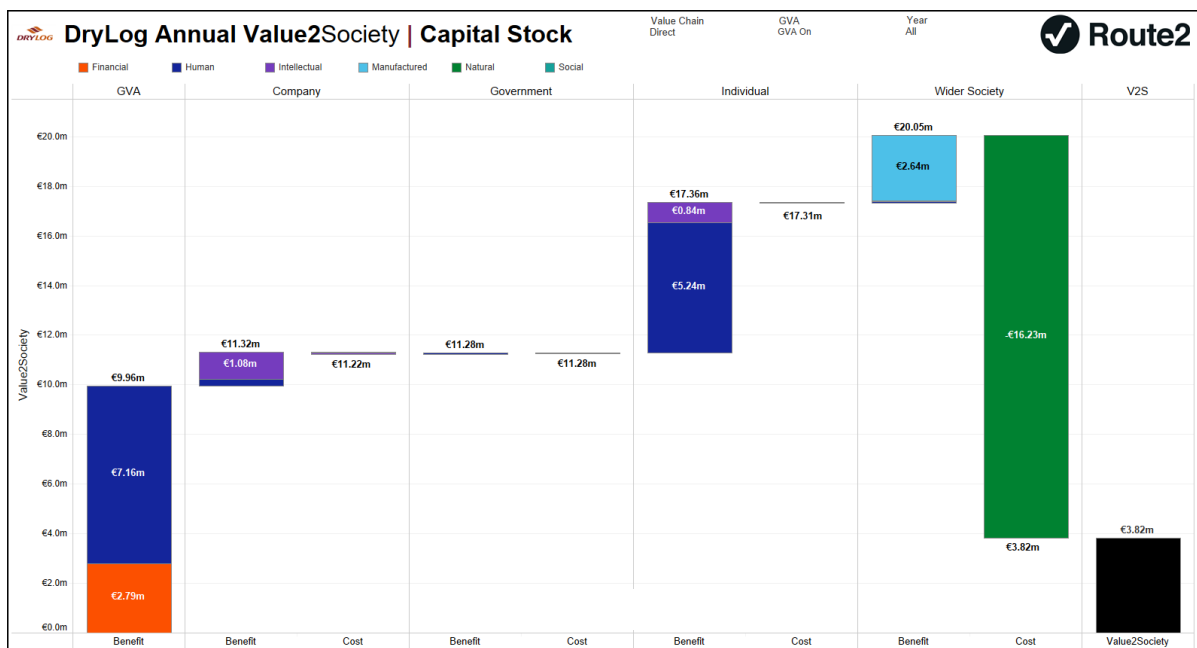


Fig 2: Value2Society™ Waterfall – Capitals

Results – Peer Comparisons

To provide context, DryLog’s direct operations results were, where possible, compared to three competitors – **Eagle Bulk, Genco and Scorpio Bulkers**. All three already produce a sustainability report. Eagle Bulk (as with DryLog’s sister company GasLog) structure their report according the SASB² guidelines whilst Scorpio Bulk follow the structure of the GRI³. Currently SASB and GRI (along with CDP⁴, CDSB⁵ and IIRC⁶) are collaborating to develop a single set of reporting guidelines in an effort to reduce the complexity and confusion

surrounding sustainability reporting. Irrespective, from our understanding, the collaboration will not yield the comprehensive ‘value based’ outputs unique to the Value2Society™ approach. **Figure 3** reinforces the dominance of DryLog’s environmental impacts (to the overall Value2Society™), but also illustrates outperformance against the peer set with respect Ballast Water management and Grey and Black Water generation. This outperformance, due to associated unit costs, is the primary reason why DryLog is ranked first overall, despite only topping 5 of 15 indicators.

² Sustainability Accounting Standards Board
³ Global Reporting Initiative
⁴ Carbon Disclosure Project

⁵ Climate Disclosure Standards Board
⁶ International Integrated Reporting Council

Capital	Indicator	DryLog		Eagle Bulk		Genco		Scorpio Bulkers	
		V2S	Rank	V2S	Rank	V2S	Rank	V2S	Rank
Human	Bullying, Discrimination and Harassment	€ 0	1	-€ 1,014	3	-€ 757	2	-€ 1,514	4
Intellectual	Employee Turnover	-€ 137	1	-	-	-€ 140	3	-€ 140	2
Manufactured	Optimised Hull Form	€ 1,278	2	-	-	-	-	€ 1,181	1
	Technical Retrofitting - Energy Efficient Propellers	€ 0	3	-	-	€ 162	1	€ 591	2
	Technical Retrofitting - Engine Modifications	€ 0	2	-	-	-	-	€ 195	1
	Technical Retrofitting - Low Friction Hull Coating	€ 639	2	€ 815	1	€ 431	4	€ 591	3
	Technical Retrofitting - Scrubbing	€ 1,516	4	€ 5,393	1	€ 1,765	3	€ 2,406	2
Natural	Air Pollutants	-€ 10,424	2	-€ 13,309	4	-€ 8,519	1	-€ 11,647	3
	Ballast Water	-€ 587	1	-€ 696	3	-€ 8,860	4	-€ 588	2
	Black Water Generation	-€ 2,456	1	-€ 3,352	2	-€ 2,504	3	-€ 5,006	4
	Greenhouse Gas Emissions	-€ 3,913	2	-€ 5,109	3	-€ 3,239	1	-€ 4,438	4
	Grey Water Generation	-€ 1,535	1	-€ 2,095	3	-€ 1,565	2	-€ 3,129	4
	Heavy Metals & Base Cations	-€ 91	2	-€ 113	4	-€ 73	1	-€ 100	3
	Operational Discharges	-€ 64	4	-€ 49	3	-€ 37	1	-€ 42	2
	Particulate Matter	-€ 2,064	2	-€ 2,612	4	-€ 1,678	1	-€ 2,292	3
Total	-€ 17,838	2.0	-€ 22,141	2.8	-€ 25,014	2.1	-€ 23,932	2.7	

Fig 3: Value2Society™ - Benchmarking

Results – Enabled Case Studies

Coal and grain are typical of the commodities we ship between continents. Efforts were made to ensure comparison between the full value chain impacts of the two commodities. Therefore ‘upstream’ (commodity production) the impacts assessed and evaluated comprised employment benefits, workplace injuries & fatalities, greenhouse gas emissions & water consumption. Downstream (commodity consumption) the impacts assessed and evaluated comprised product benefits (in terms of avoided energy and food ‘poverty’), greenhouse gas emissions and water consumption. The impacts of these commodity value chains were attributed to DryLog according to the proportions shipped by DryLog and the proportion of the commodity’s final sale price attributable to sea freight (with Coal equal to 6% and Grain equal to 3%). Table 1 details these enabled impacts and shows the total enabled Value2Society™ is c. **€13M**. The underpinning research is available in the supporting materials.

DryLog’s initial 2019 Value2Society™, based on our direct operations & our role in the coal & grain commodity value chains, is equal to c. €16.5M

Impact	Coal €M	Grain €M
Upstream	1.070	1.381
Employment	1.501	3.131
Injuries	(0.005)	(0.006)
Fatalities	(0.012)	(0.011)
Water	(0.014)	(1.269)
GHG Emissions	(0.401)	(0.463)
Downstream	3.804	6.389
Product Benefit	6.315	6.772
Water	(0.062)	(0.152)
GHG Emissions	(2.448)	(0.231)
Total	4.874	7.770
Combined	12.644	

Table 1: Commodity Value Chain Impacts

Insights

The Value2Society™ results are based on data surfaced by DryLog, Route2 research and jointly arrived assumptions. These initial (direct operations) results demonstrate the benefits of implementing various ‘efficiency measures’ that are largely recognised within and encouraged by the Maritime Transport Industry.

By understanding the respective magnitude of different impacts, we are now able to identify interventions that will generate the largest net economic benefit (both reducing financial and societal costs) and optimise investments accordingly.

For example, the approach has enabled our company to estimate the societal benefits of extending scrubber installation (from three vessels to eleven vessels) and avoiding the release of some 1,200 tonnes of Sulphur Dioxide and 55 tonnes of Particulate Matter, equal to **€4.08M**.

Further 'energy efficiency' retrofits of our eleven vessels (e.g., propulsion & engine modifications etc.) could yield €0.65M of societal benefits in terms of avoided air pollutants.

Similarly, a large benefit of c. €1M (in terms of avoided productivity losses and well-being loss from accidents) stems from DryLog's routine Training & Development programmes; whereby, on average, each crew member spends 40 hours a year participating in safety drills and other training activities.

The case studies have also highlighted our direct operational impacts are outweighed (significantly) by those we enable, via commodity transportation. This fact does not undermine or swerve focus from the management of our own impacts, but it does force us to consider our business strategy; the evidence suggests a portion of these societal impacts and the associated costs and benefits of commodity production and consumption will, via physical and transitional events, translate as real financial costs & revenue opportunities.

Therefore, the Value2Society™ approach, through translation of impact into value terms, permits the easy integration of previously peripheral 'sustainability considerations' into day to day business management. Against today's challenging economic backdrop, it's more important than ever to allocate resources efficiently.

Through the Value2Society™ lens, through looking at the full costs and full benefits of our activities and impacts, we can establish the platform for improved decision making and more optimal resource allocation.

It's early days, and there's scope for extension (e.g. the other vessels within our fleet, our supply chain and other commodity value chains we enable) and data enhancement, but the Value2Society™ approach holds the potential to help shape our business strategy, strengthen our business resilience and perhaps equally as important, through wider uptake, place the Maritime Transport Industry as a leader in

addressing the world's sustainability challenges.

Next Steps

There are a number of opportunities to enhance the Value2Society™ analysis:

- (i) **Additional Years** – analysing historical and future years will enable trend analysis and surface the direction of travel for each impact indicator. Further, a three year baseline would enable Value2Society™ orientated targets to be set, tracked and permit alignment with industry standards e.g. the IMO's GHG 2050 goals;
- (ii) **Additional Vessels** – the current analysis is restricted to the eleven vessels owned and operated by DryLog. However, DryLog operate a further twenty six vessels. To generate a true picture of Value2Society™ these (leased) vessels require incorporation to the assessment & evaluation;
- (iii) **Supply Chain & Commodities** – the current analysis is restricted to direct operations and two commodity case studies to reflect the activities and impacts we enable. A full analysis captures our entire value chain and would therefore include the impacts we propagate through our procurement (capital and operational expenditures) and the impacts we enable through all commodities we transport.
- (iii) **Additional Impact Indicators** – introducing a more comprehensive and balanced (positive/negative) selection of impact indicators to ensure coverage across all capital stock types and pertinent Maritime Transport issues e.g. ship disposal, activities within marine protected areas etc. would serve to bolster the analysis; and
- (iv) **Platform Migration** – the Value2Society™ framework will shortly be available via an online platform enabling more autonomous Value2Society™ performance management.

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Appendix: 2019 Value2Society™ Results

Indicator	Value €M
GVA – Profit	2.794
GVA - Tax	0.007
GVA – Employment Costs	7.163
Employee Engagement	0.073
Global Living Wage	5.083
Health & Well Being	0.006
Health Insurance	0.118
Safety Programmes	0.354
Workplace Injuries	(0.001)
R&D	0.084
Training & Development	1.865
Employee Turnover	(0.093)
Hull Coatings	0.492
Hull Form	0.983
Scrubbing	1.167
Air Pollutants	(8.019)
Ballast Water	(0.451)
Black Water	(1.889)
Greenhouse Gases	(3.010)
Grey Water	(1.181)
Heavy Metals	(0.070)
Operational Discharges	(0.049)
Particulate Matter	(1.588)
Solid Waste	(0.021)
Community Investment	0.005
Direct Value2Society™	3.822
Grain	7.770
Coal	4.874
Enabled Value2Society™	12.644
Total Value2Society™	16.466

Appendix Supplementary Materials

This summary report is supported by a fuller report and interactive results dashboards:

Report File Name: **R2_EXT_DryLog-V2S-Report_20210324**

Dashboards File Name: **R2_EXT_DryLog-V2S-Results_20210324**