

The Clean Transition Initiative is about leaving a clean legacy as the world transitions towards renewable energy sources and Oil and Gas assets become obsolete. It calls on the industry stakeholders to face decommissioning obligations with sharper collaboration and concentrated intelligence, making it affordable and effective. Beyond the critical goal of improving financial performance of the industry, it is embracing a role for society by eliminating uncertainty, waste, and the specter of leaving a job undone. The initiative currently focuses on the North Sea Basin.

The initiative proposes to establish an independent Abandonment Management Company, which aggregates the entire end-to-end Decommissioning & Restoration (D&R) scope across operators and/or owners and takes over its execution by packaging it in material work campaigns. It offers scale to the players in the Decommissioning & Restoration supply chain to optimize and innovate, a concentration of skills to improve efficiency to the industry, and a portable solution to investors by facilitating portfolio transactions. It aims to reach a level of efficiency and cost improvements that no operator can achieve on their own.

## State of Play in D&R

Oil & Gas operators in mature basins across the world now face the challenges of the D&R of their legacy assets. Governments become increasingly worried that decommissioning will effectively happen and its impact on revenues. Supply chain actors are skeptical that expected D&R work will happen in a time frame that justifies their investment in dedicated capacity and innovation.

Excluding some successful examples in the Gulf of Mexico, no breakthrough trend has emerged, despite several efforts to stimulate an industry response. However, recent events are increasing the possibility of disruptive change:

- Several industry projections point towards an unprecedented acceleration of D&R in the North Sea in the next few years
- Stark reductions in the industry cash flows are weakening balance sheets and reveal the scale of decommissioning liabilities – now estimated at circa 12% of market capitalization for the 10 largest IOCs with material associated annual cash outflows
- D&R costs in the North Sea Basin may top US\$150 billion. The 2014 report by Sir Ian Wood estimated D&R costs in the United Kingdom alone at UK£50 billion for the next 30 years. This was further corroborated in 2016 with an estimate of US\$66 billion<sup>1</sup>. D&R costs in the Dutch sector of the North Sea are estimated at €12-15 billion<sup>2</sup>. Furthermore, D&R costs are notoriously difficult to estimate, and schedules of expenditures vary significantly

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<sup>1</sup> WoodMackenzie, 2016

<sup>2</sup> EBN/NOGEP, 2017

- Major oil companies have appointed dedicated resources who are better equipped to orchestrate responses to decommissioning challenges and guide planning decisions
- Regulators are stepping up to a point forcing new considerations<sup>3</sup>

Still, several factors continue to hamper a real breakthrough:

- Divesting assets to pass on the liability and/or postponing decommissioning work as much as possible, remain the primary approaches to delay D&R expenditure
- IOCs are unlikely to unlock the full savings potential on their own: Despite the emergence of D&R specialized staffs in large IOCs, these resources tend to remain fragmented and lacking decision power at the interface with production plans and M&A considerations
- Company culture, shaped to develop and produce, is not conducive to most efficient approaches for D&R. Engineering standards are rooted in development driven norms and teams struggle to integrate the fragmented D&R supply chain
- The competitive nature of the industry limits the sharing of information and learning
- The D&R area is rarely the place to build a career. Despite the presence of a few very talented people, it is in most cases staffed with a quantity of capacity and leadership that is not commensurate with the scale of the financial exposure

The situation varies across the world, depending on local environments. The North Sea presents a high level of complexity due to the interaction with several nations and a very high level of commercial ties between the actors. The Gulf of Mexico offers powerful examples of material efficiency gains where a stable supply chain could be established due to its large scale, the need to address hurricane damage and the effect of the “Idle Iron” rule, which imposes a time limit to decommissioning. Other parts of the world will be facing similar challenges and although geological, met-ocean, installed-base, regulatory and commercial differences will call for tailored responses, a more mature supply chain approach should benefit all.

## Shifting the Paradigm

Following six months of engagements with industry actors, including major suppliers and regulators, we believe this deadlock can be solved through a new set of assumptions:

- Accept that passing on liabilities is not a complete solution. Structural elimination can only be achieved by ensuring that the D&R is efficiently done. This assumption opens to a better assessment of D&R improvement options
- Focus totally on decommissioning with no distraction from (ultra-) late life production optionality management. A materially more efficient D&R becomes the prize
- Look at D&R with value creation in mind and the positive impact of freeing material cash-flows and enabling a reduction of provisions
- *Dare to share.* Unlock information amongst trusted partners, realizing that there is more value in sharing information than in the commercial

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<sup>3</sup> Examples include: In the NL, EBN and NOGEPa initiated the decommissioning masterplan. In the UK, the OGA decommissioning team is raising demands on operators’ plans. In the USA, bonding requirements were increased by BSEE.

optionality maintained behind walls of confidentiality for assets at the end of their life. Anti-trust regulations, while restrictive in nature, do allow for a step change in collaboration on a common problem

- Be open to solutions from other industries in the engineering of D&R work. Beyond wells *plug and abandon* the remainder of activities does not uniquely belong to Oil & Gas

Other industries are providing meaningful examples where actors have successfully responded together to a common challenge. Examples that could inspire the Oil & Gas industry include:

- Some European banks are contributing together to the creation of a common and independent unit managing toxic debts on their balance sheet. Under the influence of the European Central Bank a new collaboration is emerging, which concentrates skills and relationship with critical suppliers of service and stakeholders
- Packaging recycling in a few European countries has been organized between FMCG brands to manage the post-consumption cost of goods they sell. Influenced by the threat of targeted taxation to address waste management they established a business led solution to a societal challenge
- The Marine Wells Containment Company, which was established after the Macondo accident, offers an example of an initiative between IOCs in the form of an independent company, which guarantees the industry's license to operate in the deep water of the Gulf of Mexico

These solutions emerged from the recognition of a large problem for society, the strengthening of regulators' intervention and finally the entrepreneurial response of private enterprises defining a solution compatible with commercial realities.

We believe these conditions are now appearing for Oil & Gas decommissioning, especially in the North Sea.

## Creating New Conditions for Deep Collaboration

We foresee that **establishing an independent D&R company with the following characteristics** would enable a step change:

- An independent commercial entity that drives material cost reductions by unlocking economies of scale from aggregation of work scope across different asset owners
- It is solely focused on decommissioning. Its entire capacity is dedicated to process optimization, innovation and continuous improvement in close collaboration with operators and suppliers
- It does not take over ownership of the assets or liabilities, which stay with the owners. This avoids legal and fiscal hurdles associated with the transfer of ownership. The D&R company is however responsible for the D&R performance
- It would start with less complex assets, which exist in larger quantities to establish a performance track record. It can expand to more complex assets, include more operators and move to other basins
- It is staffed to plan the D&R work, optimize the engineering in close collaboration with innovative suppliers and then contract and supervise the execution with the supply chain. It will also include regulatory expertise. A core set of employees provide these competencies,

supplemented by hired expertise and possibly secondees from participating operators

- It has executive power to plan, engineer and contract the D&R work in large campaigns with the supply chain, and has flexibility to optimize activity schedules accordingly
- It normalizes costs and benefits of participating parties in D&R campaigns for each contributing company to ensure a fair share to everyone participating
- To avoid complacency with the status quo, it is incentivized to make a material difference
- Its revenues comprise the reimbursement of administrative costs set at a competitive level and a performance based fee defined in a benefit sharing contract that motivates to deliver the most efficient results for the asset owners
- It will not cut corners from an HSE perspective, rather deliver the most-prudent D&R outcome at a cost that no operator can achieve on their own

Successfully implemented, the above approach benefits the industry, government and tax-payers in the form of **lower costs, lower provisions, portability of solution** in M&A situations and **a job well done**. It also benefits the supply chain in the form of **more predictable demand** and therefore **allows the development of new technology and innovative approaches**.

## KEY ELEMENTS OF THE CLEAN TRANSITION PROPOSAL



### Aggregate to Scale across Operators

- ▶ Share resources across a larger activity base to lower costs
- ▶ Optimize norms/standards to reduce scope without affecting quality and to influence regulators on prudent norms
- ▶ Deploy and develop alternative approaches and technologies
- ▶ Enable M&A of late-life assets by providing a portable D&R solution
- ▶ Reduce D&R provisions



### Execute with Focus

- ▶ Focus solely on D&R process optimization, innovation and continuous improvement in deep collaboration with operators and suppliers
- ▶ Actively seek solutions from other industries
- ▶ *Orchestrate* the D&R work in large campaigns with the supply chain and optimize activity schedules accordingly
- ▶ Attract, develop and sustain D&R capability and capacity



### Innovate & Integrate Supply Chain

- ▶ Develop sustainable long term partnerships with selected supply chain actors
- ▶ Foster learning curves with stable dedicated teams and equipment
- ▶ Increase utilization of existing assets in the supply chain, thus reducing costs
- ▶ Create flexibility across a portfolio of D&R and supply chain assets that allows optimization of activities

Status as of June 2017

We are in the process of incorporating Clean Transition in a Dutch legal entity to enable the necessary contractual and commercial agreements with industry operators should they agree to support the initiative. We have also established access to selected industry experts that can be associated to the effort.

At present, and over the last couple of months, we have been promoting the initiative with key operators in the industry with a primary focus on North Sea assets<sup>4</sup> and for the time-being primarily in the Dutch and UK sectors. We are engaging with reputable, influential supply chain actors to

<sup>4</sup> O&G asset inventory comprises ~600 platforms of different types, numerous floating and subsea facilities, thousands of kilometres of pipelines and nearly 8,000 wells.

assess their response should scope aggregation reach industrial scale. In addition, discussions are in progress with other major influencers in industry associations, regulators and academia.

The initiative is getting closer to a possible alliance between three or four major oil companies to cooperate on assessing the feasibility of the Clean Transition proposal. Such assessment will be based on actual decommissioning portfolios as well as the governance and commercial framework for the independent D&R company.

## Founders

Clean Transition was founded by Jean-Baptiste “JB” Juery and Frits Wolters. They build on their industry experience with Shell and other multinational companies and have a passion for the subject.



JB is an experienced Finance executive (e.g. Divisional CFO and Group Chief Auditor at Shell). He has personally contributed to material transformations of industry supply chains, first with Unilever and then with Shell, delivering material margin improvements and capital cost reductions. Throughout his career, he has delivered new levels of transparency on performance, which enabled material improvements and enhanced collaboration between leaders. JB brings a successful leadership experience across industries (FMCG, Retail, Oil & Gas) and cultures. He blends easily in teams and is passionate about rallying people behind innovative ideas.

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Frits has over 25 experience in the Upstream Business gained through a series of technical and commercial roles in Shell. He worked and/or lived in Europe, the Middle-East, the Far East and in the Americas. In his last role, as VP for Supply Chain Excellence, Frits led the transformation of many of Shell’s key categories and procurement practices influencing more than \$60bln in annual third party spend. Frits is a graduate from Delft University of Technology, where he obtained a MSc in Mining and Petroleum Engineering. Frits lives with his family in The Netherlands.



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