THE RESPONSIBLE PROJECT:
A VIEW ON SOCIAL LICENCE

In today's world, expectations for sustainable practices are fast becoming the norm. Countries, the public and communities are requesting transparency, the application of higher environmental standards and involvement in decision-making processes when new developments in a marine environment are proposed. Marine infrastructure projects not only require environmental permits and works licences to be in place, they also need a Social Licence to Operate (SLO). This article describes the social licence in this fast-changing context of information and technology, and explores tools that can be used to develop a 'responsible project' and provide a successful and sustainable outcome for society and the environment.

The Social Licence to Operate is a complex, dynamic and layered process that complements the legal environmental approval process.

Definition of Social Licence to Operate

The Social Licence to Operate (SLO) lies more in the realm of the social sciences than in engineering. Its development is attributed to the work of a group of social scientists. This body of work is increasingly relevant to the worldwide dredging industry as changes in attitudes has resulted in communities and governments expecting the willing application of higher environmental standards by owners and contractors in construction activities.

A social licence or SLO is not a formal licence. It is the acceptance by the wider public (community) of a project, a proposal or a new development through all phases of the project, from its inception to its operation. In contrast, a Legal Licence to Operate (LLO) is the attainment of required legal and institutional approvals that must be granted for a project to proceed. Having attained one, does not guarantee the other (Komnitsas, 2020).

While acquiring an SLO involves informal community engagements and negotiations, the LLOs require formal regulatory processes that include environmental approvals, various planning approvals and others that involve trade laws, labour usage, indigenous title licences and the like.

Both the SLO and the LLO processes can overlap but are usually not contradictory. For example, while an LLO may also require public consultation, it is mandated and monitored by the regulatory authority in some way (Komnistas, 2020). The requirement of consultation is one of those mechanisms within the formal LLO approval process that allows social licence to feed into it. This includes consultation with government bodies other than the consent body, as well as consultation with other stakeholders and local communities. Globally, there are many processes and many terms in use but most are similar or have similar meanings.

Respondents to an Australian CSIRO research paper described the legal licence as 'formal permission issued by government in line with legislated requirements' but they saw the SLO as 'something their companies needed to earn from their communities' (Moffat et al., 2015).

Project proponents should be aware of the importance of SLO and the widespread reach of modern communication techniques such as social media.

Background

The term 'Social Licence to Operate' emerged in the mining industry in the late 1990s, when community trust in governments was declining and public approval in mining had plummeted in spite of the economic arguments. It came as a realisation that communities required more than government approvals to be convinced of mining's merits. Community or 'stakeholder' engagement was also required.

It became evident that the increasingly environmentally aware public, with activist help, had used the SLO process to apply pressure on mining companies to lift environmental standards. The Social Licence to Operate has lately evolved into a strategic management and planning tool with respect to climate change, overfishing, pollution and a growing list of other impacts (Komnitsas, 2020; Kelly et al., 2017).

The responsible project

A 'responsible project' is one that is founded on sound environment science, regulatory compliance and has achieved its SLO, without suspicions of inducement. The need for both an ongoing SLO in addition to LLOs is due to a sense that responsibilities need to be shared between government and the project proponents in the face of the increasing lack of trust in governments and business (Moffat et al., 2015). This outcome to shared responsibility is 'the responsible project'. Additionally, it is a project where there is trust that businesses operate according to their attained permits and where there is trust that the permit conditions are enforced where needed. If government is not able to enforce compliance to the environmental and social requirements, the project or activities may face a premature end.

Stakeholders

Communities, individuals and groups affected by a project, form part of a large social category called stakeholders, who either:

- have a financial interest, or will receive a reward in some way;
- are directly impacted, geographically;
- have an interest or a concern for reasons ranging from the pragmatic to the ideological; or
- are seen as important to engage around questions of social acceptability.

Nowadays, stakeholders are the product of an increasingly diverse, expanding and environmentally sophisticated population. They will grant the SLO but not necessarily with unanimous endorsement.

Stakeholder communities

To make some sense of this, Voyer and van Leeuwen (2018) have categorised stakeholders as consisting of 'Communities of Place' and 'Communities of Interest'. We have added a third type; the 'Communities of the Disengaged'. The three types of stakeholder communities are illustrated in Figure 1.

Communities of Place is defined as those affected by the project through geography. Traditionally, these community's interests and concerns were local and pragmatic and their communication somewhat muted.

But increasing disquiet over negative social and environmental impacts, and the availability of social media and the internet, the Communities of Place are increasingly more vocal, influential and better equipped. However, it is not unusual for division of opinions to occur and a community to respond with polar opposite viewpoints. In high living standard countries in particular, local economic, business and employment opportunities are balanced against fears of environmental and social impacts and the Not-In-My-Back-Yard (NIMBY) attitude (Voyer and van Leeuwen, 2018).

Communities of Interest are defined by stakeholder attitudes towards the project and not geographical location. It will include those in support and against the project, but often from a wider and even a global perspective. An effective transnational community in opposition to the project may arise that is financed and led by sophisticated activist organisations.

If the project profile is elevated to the national or transnational dimension, project proponents may be obliged to shift their SLO focus more towards these communities of interest, leaving local communities side-lined (Voyer and van Leeuwen, 2018).

Communities of the Disengaged are the wider community or public opinion, whose recruitment is sought by both proponents and activists to their cause. If the proposed or existing development becomes contested, without the community of the disengaged being informed and taking a particular viewpoint, public opinion will not shift in support of either side. In case a project proponent loses its 'good' reputation, it will be extremely hard to attain approval nor for the same proposal in another location.

Conflict

The SLO is not simply a collection of 'feel good' principles. Many projects are contested by opposing stakeholders. It is expected that project proponents and contractors will at times have to robustly advocate for their projects and work methods as is shown in Figure 1.

Depending on the size and nature of the project, stakeholders can oppose to one another from the local to the global level (Voyer and van Leeuwen, 2018). Activist organisations at the global level are sometimes referred to as 'TANs'

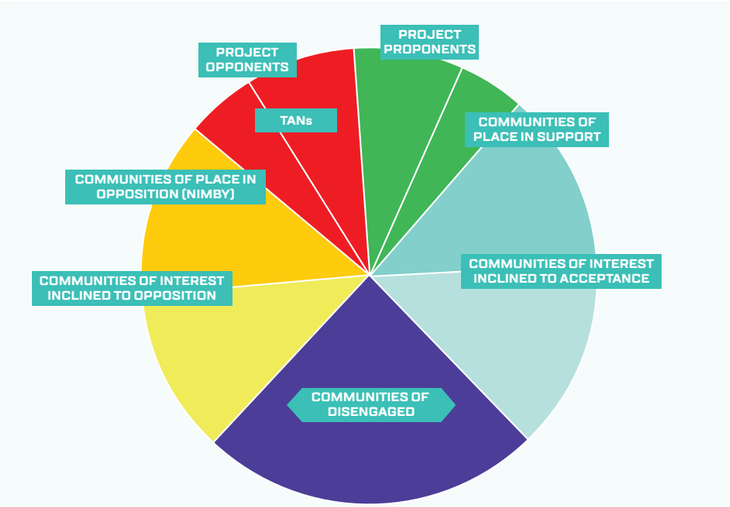

FIGURE 1

Stakeholder community types.

TABLE 1

An interpretation of the four factor 'pyramidal' model and the SLO.

THE FOUR FACTOR MODEL – Social Licence				Legal Licence
Level and label		**Description**	**Role in determining SLO levels**	**Approvals**
TRUST	4 Institutional Trust	Relations between stakeholders and proponents are based on regard for each other's interests.	Without this, psychological identification with the project is unlikely.	Stakeholders and the wider community can clearly see that the approval conditions are being met and maintained during the construction and operation phases. This applies in particular to environmental approvals.
	3 Interactional Trust	Proponents listen and respond to stakeholders, keep promises and engage in dialogue and reciprocity.	Without this, stakeholder approval is less likely. If both 2 and 3 are lacking, stakeholder approval would be rare. If both are present, approval is likely.	Environmental and other approvals including permit conditions have been clearly communicated to stakeholders.
LEGITIMACY	2 Socio-political legitimacy	Proponents contribute to the well-being of the region and respect the local way of life. Project meets stakeholder expectations of their role in the community and acts according to stakeholders' view of fairness.	Without this, stakeholder approval is unlikely.	Environmental and other approvals have been obtained.
	1 Economic legitimacy	The project offers a clear economic benefit to the community.	Without this, most stakeholders will withhold or withdraw the SLO.	The approval process (environmental and other approvals) start.

(Transnational Advocacy Networks). A number of TANs are involved in environmental and global warming movements that have ensnared marine project developments, especially when linked with fossil fuel expansion (Hudson, 2002). The Wilderness Society's organisation of opposition to oil exploration in the Great Australian Bight is an example.

Moffat and Zhang, in their 2013 research of Australian attitudes to coal seam gas, agree that gaining stakeholder trust is the key. They have suggested that overcoming suspicion and gaining trust can be achieved through:

- perceived procedural fairness;
- contact quality and to a lesser extent, contact quantity; and
- impacts on social infrastructure.

The four factor model

In the last 20 years, a number of researchers have worked on ways to measure the SLO. This has resulted in a consensus that the community understanding of 'legitimacy' and 'trust' is key to measuring stakeholder attitudes. Legitimacy, as a societal norm has been understood for some time, however recent researchers have tended to view trust as the key to acceptance. Where, according to Gehman, stakeholders develop a sense of co-ownership with the project (Gehman et al., 2017).

Boutilier and Thomson (2011) developed what has become the four factor 'pyramidal' model of the SLO. This model emphasised the fact that while obtaining legitimacy is critical, it is not sufficient and stakeholders needed a higher level of trust in the project before they would provide the social licence.

They hold that positive perceptions of a project will begin with economic legitimacy, i.e. showing an economic benefit to stakeholders, however higher perceptions of legitimacy are socio-political. Legitimacy is necessary but not enough. Proponents should work to reach a level of interactional trust with stakeholders and then go on to achieve institutionalised trust. At that point, the project could be regarded as having a Social Licence to Operate.

In the day-to-day dredging world, the simple equation that project legitimacy equals the attainment of the legal licences, has justification. If these statutory requirements are inserted into the model at the legitimacy level, it helps explain why proponents have so many times been surprised that the gaining of approvals has not quelled stakeholder opposition.

The four factor 'pyramidal' model is comprehensive and roadmaps the required levels of trust that need to be obtained. Table 1 sets out its framework and has been expanded to show an interpretation of how it can interact with the legal licence process and how the LLO can assist in achieving and maintaining stakeholder trust.

Environmental approvals

Obtaining environmental approval for the project to proceed is critical. Without this approval, the project will not proceed and all other efforts will have been in vain. The approval is also critical to attaining project legitimacy. It is often the most difficult and time-consuming part of the whole pre-project stage.

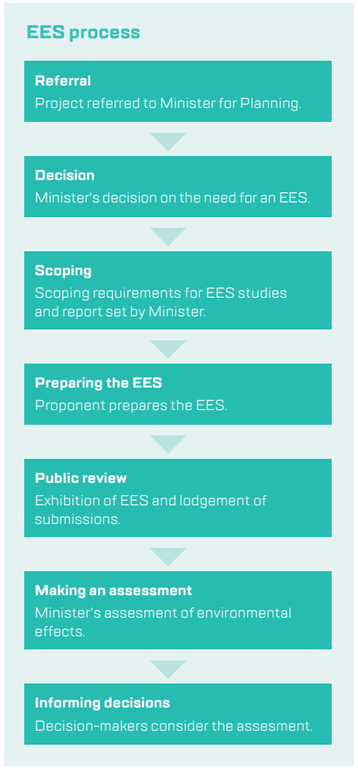

FIGURE 2

Flow chart of the EES process in Victoria, Australia. Source: Victoria State Government, Department of Environment, Land, Water and Planning.

Proposed infrastructure works trigger an approval process. The process is mostly composed of a number of environmental and works licence applications to be granted from different governmental bodies. An approval process is intrinsically related to the local legislation that is different for each country and often between the regions or states within a country. However, at a high level, there is certain degree of consistency in the approval application process and in the way infrastructure projects in the marine sector are assessed.

The Initial Environmental Risk Level (IERL)

In general, the industry acknowledges that it has the potential to create significant environmental impacts and must utilise the range of mitigation and management strategies that are available. Finding a balance between economic and environmental values is crucial to the acceptance and therefore, the success of a project.

From the very earliest project concept, proponents are assessing and juggling environmental risk to find an outcome with the best possibility of satisfying regulators and communities. Eventually, a design concept with a certain environmental risk profile is settled on to form the basis of the submission.

A suitable term for this could be called the 'Initial Environmental Risk Level' (IERL). Its importance is critical. Not only for the success of the environmental approval, but for stakeholders' initial responses.

It will be shown in the case studies that if the IERL is seen as too high, the proposal's environmental riskier aspects will become a rallying cry for stakeholder opposition.

The EES process in Victoria, Australia

Given that the presented case studies in this article are located in the State of Victoria, Australia, the State's Environmental Effects Statement (EES) process is briefly outlined and illustrated in Figure 2. An EES evaluates the environmental and socio-economic effects of a proposal in a legal framework.

At an initial assessment of a project proposal, it is decided whether a more in-depth and formal EES or environmental impact assessment is required. This depends on the size of the project, sensitivity of the surroundings and the potential impacts.

Generally, development proposals that have the potential to significantly impact the environment include the necessary public consultation mechanisms, where the general public has the opportunity to react, give feedback and express their concerns on the proposal. This process is incorporated into the approval process.

A public consultation in which stakeholders provide feedback, runs for a certain period in time. Meaningful responses and valuable concerns from the community may be integrated in a permit's conditions. Generally, a permit comes with conditions for the project owner to comply with. These conditions can reflect on the execution method of the project. A common example is that the dredge material or part of it is originally proposed for ocean disposal, but after objections on grounds of contamination concerns, generation of turbidity and impacts on sensitive marine species, the dredge material needs to be disposed of elsewhere, mostly, on land.

In the effort to explore reuse and beneficially use of the dredged sediments, innovative technologies and methods can result from these permit conditions. Additionally, permit conditions can include environmental offsets. This involves that the environmental loss or damage is compensated for. Offsets can range from the physical replacement or creation of habitat elsewhere, or can be imposed in other forms such as funds.

Stakeholder engagement

There are opportunities to take community involvement a step further with the active recruitment of stakeholders of place as well as interest and the unengaged during all phases of a project. A practical and non-limitative overview of participation and stakeholder engagement is illustrated in Table 2. The next section elaborates on a number of strategies mentioned in Table 2, presenting them as tools to attain 'the responsible project'.

Tools to gain stakeholder trust

There exist tools and strategies that can assist project proponents active in the blue economy and in marine infrastructure and developments to act proactively. Many are already adopted by companies. The aim is that those tools are known and used as to contribute to the attainment of these legitimacy and trust levels, and therefore to the development of a responsible project. The following sections detail existing approaches and concepts that can be considered and utilised at an early stage of a project or later on, however it doesn't guarantee a social licence and a successful responsible project.

TABLE 2

Stakeholder engagement though all project phases.

	Stakeholder engagement
EARLY PROJECT CONCEPTION	· Develop a communication strategy plan for the project, potentially identifying environmental stewardship opportunities. · Identify stakeholders and actively commence communication via town halls, social media, publications and establish regular lines of communication.
PRE-CONSTRUCTION **Design** **Approvals** **Procurement**	· Continue with lines of communications with stakeholders. · Develop activist counter strategies, correct disinformation and robustly defend the project where required. – Demonstrate corporate social responsibility commitments. – Roll out early-stage environmental stewardship programmes. – Update on the approvals progress.
CONSTRUCTION	· Continued communication. · Continue with activist counter strategies where disinformation is employed against the project. · Continue to engage stakeholders. · Clearly outline the environmental approvals conditions. · Organise stakeholder participation.
OPERATIONS	· Continued communication. · Implement post-construction/operational ongoing environmental stewardship programmes. · Make use of smart technology for licence compliance. · Demonstrate environmental approvals conditions are met.

Corporate Social Responsibility

The concept of 'Corporate Social Responsibility' (CSR) focusses on the corporate level of the proponent's organisation. It aims to map and assess the performance of a company by taking into account societal, environmental and economic issues (Kelly et al., 2017). It should underpin the proponents' philosophy in achieving a responsible project and include early and detailed demonstrations of environmental responsibility.

Sustainable Development Goals

Also on the corporate level is the development and implementation of the United Nations' Sustainable Development Goals (SDGs). There are 17 sustainable development goals in terms of economy, society and ecology. Adopting and embedding SDG targets into a company's business represents an opportunity for companies to align their own sustainability goals with broader societal goals and reflects a company's engagement in society and the environment in the long term.

Building with Nature

The starting point is simply building 'with' nature, not 'against' it. The concept considers the natural systems in the design of a project, rather than only considering the technical aspects (Van Raalte et al., 2007). Integrating Building with Nature in the design, often requires an innovative and novel approach that asks questions, such as:

- Can the project bring other benefits to its immediate vicinity in addition to socio-economic benefits such as employment?;
- How can nature help us in building or making what we need?;
- Can the structures be used in another way?;
- What can be added or combined to achieve more value in your infrastructure?; and
- Is there room for ecology?

An example of this type of thinking can be seen when Dr Todd Bridges (National Lead for USACE Engineering With Nature Initiative) challenged his audience to consider trees and mangroves as infrastructure (Engineering With Nature, PIANC 2020, Fremantle, Western Australia).

It is recommended that each new major project goes through this 'thinking' process, focussing on the ecosystem context. The addition of Building with Nature aspects to a project is very likely to support the SLO and to contribute to a responsible project.

Nature-based Solutions

Similarly, as with the Building with Nature concepts, Nature-based Solutions (NbS) aim to integrate natural elements or use natural solutions in infrastructure. NbS is the collective name for more sustainable solutions, as defined by IUCN, actions to protect, sustainably manage and restore ecosystems (PIANC, IUCN).

Nowadays, NbS is an emerging practice in coastal protection and climate adaption, where its place is claimed alongside the traditional engineering solutions.

When a project adopts NbS, the starting point is a thorough understanding of the natural environment and physical processes. Additionally, an added value is a proactive stakeholder engagement seeking win–wins on a social as well as ecological level. Furthermore, it also tends to prioritise the local economy by using local resources and products.

Ecosystem Services

Ecosystem Services (ES) are benefits to humans provided by the natural environment

Obtaining environmental approval is critical for the project to attain legitimacy and to proceed.

and ecosystems. The ES concept is a recent effort to evaluate the cost/benefits of a project, by assessing the economic alongside the environmental values of a project or of the area in which a project is planned. Adopting the ecosystem services approach integrates the economic aspects with the ecological values that, in turn, are also expressed in monetary terms (Boerema et al., 2016). To quantify the ecological values, the question 'What does nature allow for and what are its functions?' needs to be addressed. Incorporating the ES concept in the development of a project at an early stage provides the maximum benefit. However, even if applied in later phases of a project, it can provide significant context and insights. Integrating this approach is yet another element that increases the likelihood of a project obtaining a SLO.

Contract and procurement type

Realise clear and transparent collaboration by embedment in the right contract type and identify best practices upfront, agreeing on shared responsibilities and shared risks. Examples are early contractor involvement and an 'alliance contract'. In the case a proposal is abandoned late in the process, the often already significant investment cost is lost.

Furthermore, contractors, subcontractors and other service providers can quickly undo the work of the owners to gain stakeholder trust if they take actions that are contrary to SLO objectives and the owners' policies. All individuals and parties employed or contracted to work on the project need to understand and commit to the owners' SLO objectives.

Communication strategy (Plan)

This plan should be developed at the beginning of a project, even before the concept has been finalised. If it is developed early, it has the best potential to guide the communication culture of the proponents' organisation by elements such as:

- setting out the intended openness, transparency and degree of proactiveness for engagement with stakeholders;
- determining how much information will be placed in the public domain; and
- adopting communication streams through:
  - social media;
  - dedicated interactive websites;
  - community information sessions/ meetings/briefings and workshops;
  - establishment of a community liaison group or stakeholder advisory committee;
  - letterbox and e-newsletters; and
  - TV/radio media releases and printed advertising.

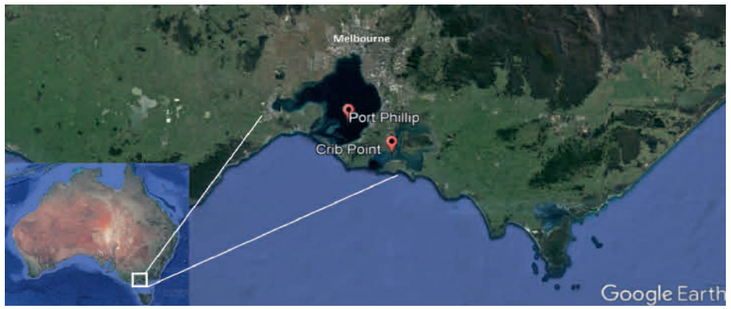

FIGURE 3

Location of the two case studies in Victoria, Australia.

Environmental stewardship

Examples of environmental stewardship include activities, such as (re)planting trees and mangroves, restoring degraded areas, or cleaning up rubbish from beaches. This tool is most important in achieving the upper level of trust as it focuses on the active involvement of the local community and local perspectives by prompting questions such as:

- How can we involve the local and distant communities?;
- What are their concerns and needs?; and
- In what fields can we improve things and where would they feel valorised/want to be involved in?

Environmental stewardship is an opportunity to utilise local environmental knowledge. Many individuals, local communities, environmental groups, municipalities and governments around the world are leading, supporting and promoting actions to steward the environment (Bennet et al., 2018). This can also be initiated by project proponents or contractors to obtain and maintain a SLO and support a company's CSR.

Environmental stewardship should be initiated as early as possible. As with most of the other tools, an early start establishes the desired on-going culture of stakeholder engagement throughout all phases of the project. During early project conception already, opportunities for potential environmental stewardship activities could be identified.

All individuals and parties employed or contracted to work on the project need to understand and commit to the owners' SLO objectives.

Case studies

The two case studies from the marine sector in Victoria (Australia) focus on the rather traditional marine activities; dredging (deepening) and oil and gas developments. However, the SLO is no less applicable to the emerging industries, such as offshore renewable energy and seabed mining.

The examples illustrate the important role of community involvement and social licence in the approval process, and aim to show how the concerns and issues have been responded to. Both projects experienced a similar level of public opposition in the beginning but managed the process in contrasting ways obtaining contrasting results.

Case study 1: Port Phillip channel deepening project, Melbourne (2004–2009)

The Port Phillip channel deepening project (Port Phillip CDP) involved the deepening of the channels in Port Phillip Bay leading to Melbourne for the Port of Melbourne Corporation. The dredging works were conducted by Boskalis in 2009 and involved the removal of approximately 23 million m^3 by trailing suction hopper dredger, of which around 3 million m^3 was contaminated sediment. The material was disposed of in two designated dump areas in the bay. The contaminated sediments were stored in an existing spoil ground, an underwater containment area bunded with clay walls and capped by clean silt and subsequently sands. The remainder of the uncontaminated sediments were placed in a new spoil ground, also located within the bay (Bradford and Siebinga, 2009).

The dredging works were preceded by a 4-year-period of extensive environmental studies, risk assessments and intensive public consultations. An Environmental Effects Statement (EES) was submitted in early 2004, followed by a supplementary EES. After numerous delays and a trial dredging programme, the dredging works commenced in early 2008. Protests from the public however continued after the LLO was obtained.

Community consultation could not reassure a local group of bayside residents who were clearly opposed to the project that eventually led to court action. This temporarily stopped the dredging operations but eventually the works were completed in late 2009.

The problem

The project caused significant controversy among the Victorian population and was strongly opposed by scientists and many groups representing the community. It was believed that the dredging would disturb the marine environment throughout large areas of the bay. Public rallies were held between 2004 and 2008, involving surfers, as well as people in canoes, kayaks, boats and yachts who put themselves in the path of the trailing suction hopper dredger, delaying the project.

Solutions

The client and contractor had formed an alliance contract to share responsibilities and risks, and also the communication effort, leading to successful completion of the project. Stakeholder acceptance of the project was a result of the accurate and transparent public communications. Extensive communications efforts were undertaken to demonstrate to the public that the dredging works were not detrimental to the environment and to inform and educate as to how the environmental impacts were to be managed.

Stakeholder engagement included public consultations, public hearings, a dedicated website, a 24-hour toll-free telephone number, weekly press conferences, media releases, mailing lists, signage around the Bay and notices to mariners (Bradford and Siebinga, 2009).

In this project, the alliance invested in research and innovation to address the permit conditions and to manage the impacts of concern. It resulted in the development of a ripper draghead and work method to dredge the reef at the bay entrance to minimise the likelihood of residual rock tipping over the edge and falling into the 80-metre-deep canyon and damaging sensitive corals, as shown in Figure 4A and 4B..

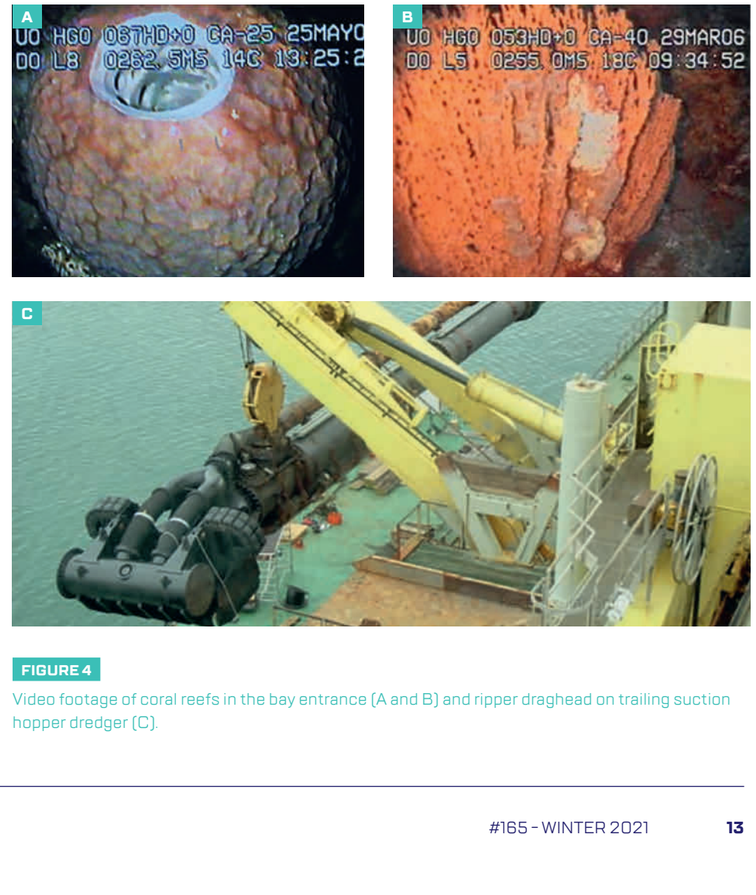

FIGURE 4

Video footage of coral reefs in the bay entrance (A and B) and ripper draghead on trailing suction hopper dredger (C).

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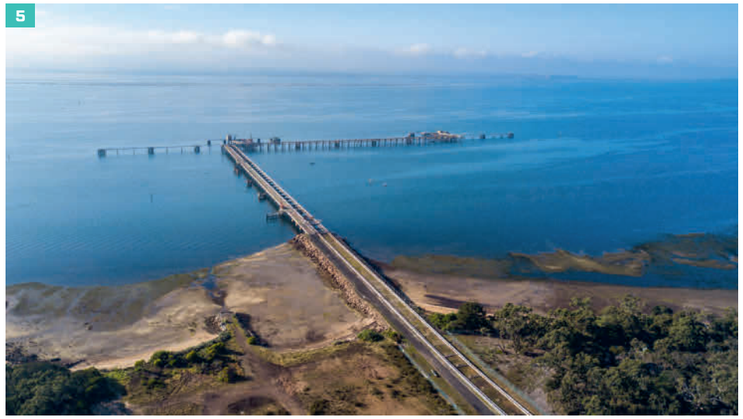

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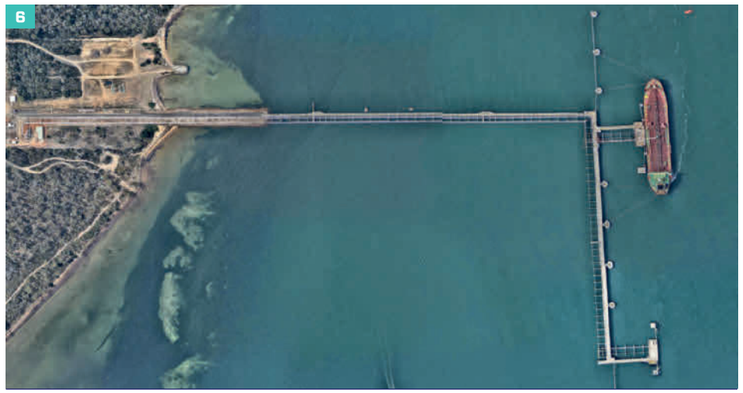

FIGURE 5 AND 6

Crib Point in Westernport Bay, the location where the FSRU was proposed. Photo © AGL, Gas Import Jetty and Pipeline Project EES.

This particular case study was selected as it points out that despite a strong and continued opposition, and significant delays, the project was executed with a responsible consideration for the environment, which prompted the development of new designs and methods. The open and transparent communications efforts by both client and contractor appeared to be instrumental in overcoming the obstacle of the negative reactions and in reassuring the many stakeholders that the channel deepening project could be conducted in a safe and environmentally sustainable manner (Bradford and Siebinga, 2009).

The successful features were:

- the initial strong opposition quickly dissipated once the works were completed and when it became apparent that there were no immediate noticeable impacts observed; and
- the creation of an alliance type of contract that shared the risks, the responsibilities and the problem solving;

This was achieved however, at the cost of:

- the consultation period, which was lengthy; and
- the negative perceptions of Melbourne residents and industry members around the Bay, which began to dissipate during the work but did not disappear entirely until years after the project was completed.

Additionally, a data analysis tool applied to the vessel tracking system was used to prove that the operations proceeded in accordance with the environmental management plan. Online video data was available for the public to view in real time and follow the dredging of the hard rock near the reef (Figure 4A and 4B). Later surveys showed re-growth of the original kelp vegetation (Bradford and Siebinga, 2009).

Case study 2: AGL Gas import project, Westernport Bay (2018–2021)

The second case study on the other hand outlines how a determined community succeeded in stopping energy giant AGL from installing a Floating Storage and Regasification Unit (FSRU) at Crib Point in Westernport Bay and the 60-kilometre-long pipeline proposed by Australian Energy Infrastructure APA.

This is a recent example of a project proposal being scrutinised based on its environmental effects and impacts. The proposal went through an extensive environmental study and assessment, complemented with public hearings with a variety of committed and concerned stakeholders. In October 2020, the newspaper quoted, 'This is the largest and most complex environmental assessment carried out in Victoria, with 6058 submissions and a record number of public objections.'

The project

In 2017, AGL, an Australian energy, electricity and gas provider, proposed to develop a liquefied natural gas (LNG) import facility. The facility was to be located at Crib Point in Westernport Bay, on Victoria's Mornington Peninsula, 60 km southeast of Melbourne. The facility required the building a 290-metre-long permanently moored vessel called a Floating Storage and Regasification Unit (FSRU). It was intended to receive LNG via shipments from LNG carriers of approximately 300 metres in length, which was to moor adjacent to the FSRU. The LNG would be converted back into gas for distribution, so the project also included the building of a new gas pipeline connecting to the existing gas network.

The setting

The wider Westernport Bay area is characterised by low-lying coastal plains dissected by intertidal channels, mudflats, saltmarshes, seagrass beds and cold-water mangroves. It has to be noted that the proposed works were located in a RAMSAR site, a recognised wetland of international importance.

The bay is connected to Bass Strait and is a home to vulnerable, endangered and critically endangered whales, turtles, fish and water birds. The intertidal mudflats attract a large number of water birds, including migratory birds. The mudflats are important feeding and breeding areas as well as refuge, providing habitat all year round. An abundance of seabirds uses the wider area near the project area. The mudflats support seagrass, macro-algae and fauna, which along with the mangroves, provides an important breeding habitat for fish and other food sources for seabirds (DELWP, 2017).

The proposal went through an extensive environmental study and assessment, complemented with public hearings with a variety of committed and concerned stakeholders.

Although the area is already developed, it has been semi-rural for many years. Industrialisation and heavy industry are recent and confined to the Hastings area. There is no large-scale urbanisation but tourism now plays a key economic role for the regional communities along the coast. Nearby Phillip Island is a big tourist site of prime interest amongst tourists (DELWP, 2017).

Issues and concerns

With the site being a conservation area with high natural values, regulators and stake-holders had two major concerns: 1) the marine component of the project is located within a Ramsar wetland of international importance; and 2) AGL applied to discharge wastewater and chlorine from the proposed floating gas terminal into the sea.

This discharge of potentially contaminated wastewater into the bay was regarded as a significant issue as it was not what known what affect it would have on the marine biodiversity. As part of the regasification process, 450,000 m^3 of seawater per day would be taken in from the surrounding waters to heat cold LNG (stored at a temperature of -162°C). In return the same amount of cold seawater from the FSRU would be pumped back into the Westernport waters. The return water would have been 0.3°C to 7°C cooler than the ambient seawater temperature and contain chlorine from the process. Furthermore, there were also climate change issues amongst

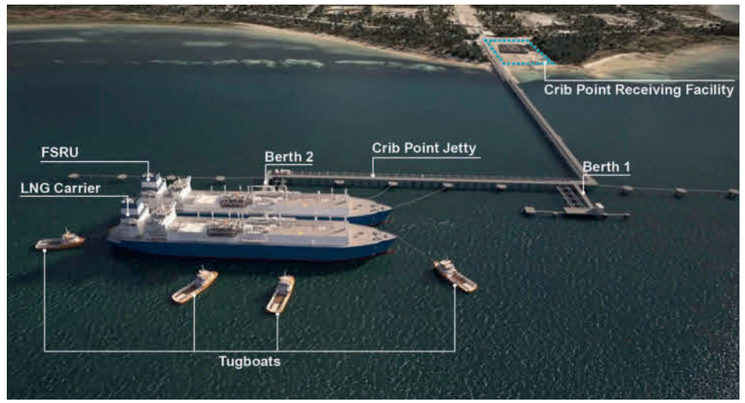

FIGURE 7

Proposed layout of the FSRU and LNG Carrier alongside at Crib Point Jetty. Photo © AGL, Gas Import Jetty and Pipeline Project EES.

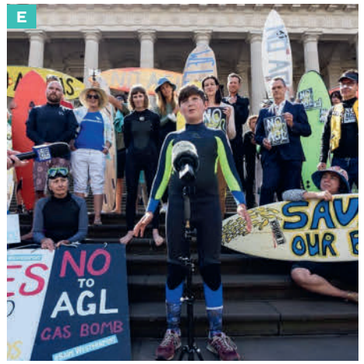

FIGURE 8A–G

Community opposition and public protests against the AGL Crib Point proposal in Melbourne and Westernport Bay. Photo © Save Westernport Facebook page and Environment Victoria.

environmental groups over the facility handling fossil fuel.

Stakeholders began to ask the questions:

- How would the cold chlorine discharges and other toxicants affect and impact marine life and ecosystems and over what distances?;
- What would be the effect of the release of the cold and chlorinated seawater into the ambient environment?;
- Will the smaller marine organisms be entrained in the water intake?; and
- What will be the risks and potential impacts due to the increased shipping and loading and unloading operations on the marine environment, such as bilge water, contaminant releases, spills and leaks?

Timeline approval process

October 2017: AGL announced that Crib Point was the preferred project location.

September 2018: the proposal was referred to the federal as well as state (Victoria) government for assessment.

October 2018: the state minister for planning decided the project was subject to a formal environmental impact assessment, called the Environment Effects Statement (EES), and established its scope.

February 2019: the EES's scope requirements were established and over the course of 1.5 years, the statement and its supporting studies were prepared by AGL and APA.

July 2020: the final multi-volume EES was open to public comment for 2 months. In response, an unprecedented number of public submissions, more than 6,000, were lodged. This triggered the appointment of an independent Inquiry and Advisory Committee (IAC) to consider the public submissions and advise the Minister for planning.

October 2020: All submissions were heard during a 10-week public hearing. The aim of this process was to allow the IAC to hear from the project proponent, AGL, from the experts and from the submitters. At the end of the public hearings, the IAC was required to submit a report to the Minister that contained its conclusions and recommendations.

March 2021: The IAC concluded that the project would have unacceptable environmental effects and the Victorian Planning Minister decided to block the project.

May 2021: AGL confirmed to cease further development of the liquefied natural gas import jetty at Crib Point.

A determined community succeeded in stopping energy giant AGL from installing a Floating Storage and Regasification Unit in Westernport Bay.

Community consultations

AGL commenced information sessions and community meetings from mid–2017 to inform and engage with local residents and special interest groups. Consultations began soon after the announcement of Crib Point as the preferred location in order to ascertain the local community's sentiment toward the project and to identify any emerging issues they might have with the proposed development. As part of the EES preparation, stakeholder engagement continued throughout 2019 as opposition grew to the project. The feedback assisted in informing project planning, decisions and design, and the creation of a Consultation Plan and Community Engagement report. A further round of public consultation took place during the EES mandatory public comment period.

Action groups

Widespread concern about the risk to the Ramsar wetlands, local tourism, the marine environment and water and air quality, led quickly to the emergence of a range of stakeholder groups opposed to the project. Action groups organised campaigns (see Figure 8A–G) and established Facebook pages and employed social media postings. Road signs were also employed relentlessly over the 3 years, while websites provided an update on the project's approval process.

During the hearing process, the opposing community went to great lengths to challenge the many uncertainties concerning marine ecology impacts and hired experts and lawyers to represent them in their fight against AGL.

Conclusions

Both Port Phillip and Westernport Bays had iconic environmental status in the eyes of Melbourne residents. It had been anticipated that gaining SLO's for development would prove difficult. Both projects underwent the EES process resulting in a multi-volume, thousands of pages EES document. Although both project proponents began their stakeholder engagement in a similar manner, their approaches quickly diverged and the outcomes were polar opposites.

By failing to take sufficient caution in its planned waste and chlorine discharge, AGL's proposed design contained a high Initial Environmental Risk Level (IERL). This failure, and its apparent reluctance to make any substantial changes to the proposal, appeared to doom the project. It was a risky approach. Environmental approval was uncertain and broad stakeholder opposition quickly materialised.

More than a decade earlier, the Port Phillip Alliance (PPA) had also faced immense opposition. However, the proposal offered a lower IERL and the PPA responded to stakeholder feedback with efforts and solutions to reduce it further.

Although both proponents showed an understanding of the SLO process and commenced early consultation, the PPA appeared to have a better understanding of the importance of stakeholder approval, who they were and what their concerns were. AGL's response appeared less flexible and less accommodating to increasing concerns of the community.

Both projects were opposed by vocal

communities of place and communities of interest. The Port Phillip Bay dredging was adjacent to Melbourne's recreational and property-focussed shoreline that engendered a strong NIMBY movement. The proposal to place and cap toxic dredge material in the bay triggered the involvement of a large community of interest.

Westernport Bay had a much smaller local population, but managed to obtain expert evidence and legal representation to invigorate their voice. However, the project's location in a semi-rural Ramsar site of high natural value, the discharge of high volumes of wastewater and chlorinated water, its association with fossil fuels and especially the high IERL, considered dangerous and irresponsible by many, created a very determined community of interest.

Trust is key to obtain a Social Licence to Operate.

Finally, it is the comparison of both case studies with the four factor 'pyramidal' model that is the most telling. AGL's actions appeared to reflect a belief that the economic argument alone would be sufficient to obtain environmental approval and allow the project to proceed. In the model, economic justification is only the first level and as it transpired, the only level that the project would accomplish. In contrast, the PPA, in spite of all the initial stakeholder hostility, achieved all four levels and therefore sufficient stakeholder trust to justify that the project had a Social Licence to Operate.

To conclude, the Social Licence to Operate is a complex, dynamic and layered process that complements the legal environmental approval process. Project proponents should be aware of this twofold pathway. In this article, we make the connection to current trends, mechanisms and approaches that project proponents could consider and include in their strategy to propose new developments. Trust is key to obtain a social licence.

Summary

The article describes two case studies, both located near Melbourne, Australia. The Port Phillip channel deepening project (CDP) and the AGL gas import project. Both projects faced strong public opposition. The Port Phillip CDP managed to counter the concerns and to offer solutions, whilst the AGL proposal did not succeed to present its proposal in an environmentally acceptable way. So far, it is been the largest and most complex environmental assessment carried out in Victoria, Australia. The AGL case also demonstrates that small local communities can stand up against corporate interests, no matter how much money the company has invested in the approval process, as long as their efforts are backed by the deciding government. Furthermore, a project proponent and intrinsically the government need the trust of the community to successfully develop and maintain a project.

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