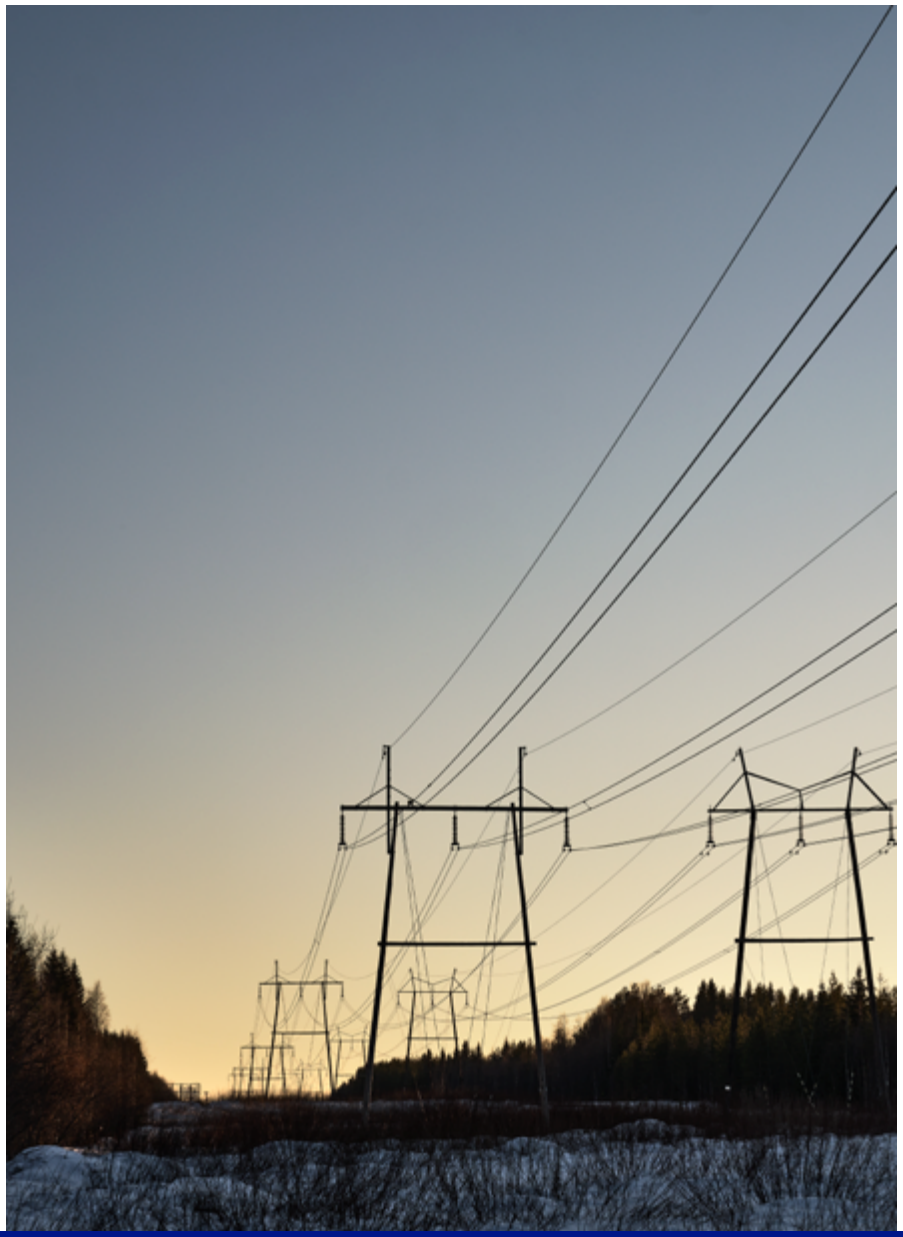

SOCIAL LICENSE TO INVEST, SOCIAL LICENSE TO OPERATE

HOW TO SECURE AND LEVERAGE STAKEHOLDER ENGAGEMENT FOR INFRASTRUCTURE IN 2022

Altermind

VAUBAN INFRASTRUCTURE PARTNERS

FOREWORD

Since its creation, Vauban Infrastructure Partners has sought to finance essential public infrastructures that provide long-term sustainable solutions to local communities. We believe that the 4 sectors we target – mobility, social infrastructure, energy transition, and digital infrastructure – allow us to meet essential societal needs.

Thus far in 2022, we have invested in district heating networks, wind farms, rail infrastructure, and waste treatment and recycling plants, among other projects. We are deeply convinced that all of these infrastructures bring undeniable benefits to the greatest number of people, but we also recognize it is essential to properly manage their potential impacts on their different stakeholders (users, local communities, public authorities, industrial partners, etc.). To ensure stakeholder acceptance and to align interests, it is essential for us to collect and understand their different expectations.

In a world marked by the need for an accelerated energy transition, taking into account the least represented stakeholders allows for a fair and socially equitable transition, corresponding to our responsible investment principles. This is why Vauban IP has decided to carry out research on the principle of the "Social License to Operate" (SLO), or the understood social contract to operate; this concept helps us to fully understand the levers likely to strengthen the consultation and engagement process with stakeholders that enables market players like us to ensure that our infrastructure projects are positively embedded in their local communities and create sustainable & shared value for all stakeholders over the long term.

This research work, which we conducted alongside Altermind, allowed us to compile academic research on SLO, obtain the point of view of various experts, share feedback with industrial partners, and organize a statistical survey with 10,000 citizens spread over 5 different countries. Through this work, we hope to improve our stakeholder engagement strategy, be transparent about our practices, and advance knowledge sharing around the concept of the Social License to Operate.

Gwenola Chambon,
CEO, Founding Partner

Mounir Corm,
Deputy CEO, Founding Partner

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Altermind is a boutique strategy consultancy. We bring together the worlds of business know-how and academia to help companies prosper. Altermind is present in Paris, London, Brussels and Berlin.

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Vauban Infrastructure Partners is a leading Infrastructure Asset Manager focused on European core infrastructure investments. Based in Paris and having a subsidiary in Luxembourg, it employs 60 professionals who have been working together for a decade. Vauban is the fully-fledged affiliate of Natixis Investment Managers, dedicated to sustainable infrastructure equity investments. Vauban targets predominantly European brownfield mid-market assets pursuing a long-term yield-driven strategy matching the underlying nature of assets and long-term commitment to all stakeholders' interests through a strong focus on creating sustainable value. Vauban has raised c. over €7 billion across 6 funds in core infrastructure from over 70 investors within 15 different countries and has invested in over 60 assets in mobility, energy transition, social and digital infrastructure across 10 different geographies.

EXECUTIVE SUMMARY

Infrastructure is at a crossroads. Climate change requires urgent action, in all realms of economic systems. The ongoing pandemic and geopolitical tensions have upended policy priorities and significantly disturbed international supply chains, putting exceptional pressure on infrastructure networks and systems around the globe. The world has now dived into a warlike period of scarce natural resources and expensive energy access, which constitutes a major test for infrastructure operators as well as their customers or end-users.

To address those critical challenges, **the world needs more and better infrastructure.** And it needs it now. Additional investments in sustainable and resilient infrastructure will be crucial in the 2020s to achieve economic growth and build more inclusive and resilient societies by 2050. At this stage, there is still a massive investment gap in the sector, with an estimated **USD 6.9 trillion required for the next 30 years in the energy sector alone to reach the Paris Agreement's targets[1].**

Infrastructure assets must therefore be delivered urgently and efficiently. This is why some countries, including in the European Union, have put in place exceptional regimes to accelerate the infrastructure investment process. This report argues that to achieve this challenge infrastructure projects holders must gain and maintain **a social license to operate (SLO), i.e. an informal "social contract" between all stakeholders giving project holders the consent they need to develop, deliver and operate a project, through engaging with stakeholders and aligning interests.** Getting only a legal license to build and operate an infrastructure is not enough: ensuring public acceptance can prove to be a time-and-cost-saving strategy for infrastructure projects by preventing blockages and conflicts while enhancing collaboration with stakeholders. SLO meets the needs of our era. Populations are asking for more involvement in project planning and delivery: **according to a survey conducted for the purpose of this study, based on a representative sample of around 10,000 citizens, 2000 per country in France, Germany, Spain, Sweden, and the US, 82% to 93% of the population feel there is a need for residents' support in infrastructure projects**. The public is also imposing greater scrutiny on infrastructure projects across a range of issues which they care about – ethical business practices, environmental stewardships, diversity and inclusion, health and safety, etc.

The rising importance of SLO has critical consequences for the delivery of infrastructure, given their very nature: they generally involve **significant investments with both global and local impacts, at community and society levels;** they concern **a great diversity of internal and external actors with conflicting interests;** they have **a long lifespan.** This requires infrastructure projects holders to be **more stakeholder-centric**, which will lead to a revision of how infrastructure is financed, designed, built and operated. According to the survey, a large proportion of local residents (directly impacted by a project) feel it is "essential" to involve them in design, construction and operation of an infrastructure.

As a result, facing the disequilibria of our times, infrastructure project holders must engage with the whole ecosystem – from citizens to local communities, local government organizations, nonprofit organizations, suppliers, shareholders, employees, subcontractors, etc. This requires a targeted and pragmatic strategy:

- As each stage of the infrastructure project poses specific issues, **engagement must be conducted throughout the entire lifecycle of the project,** offering opportunities to further strengthen benefits and get feedback for future designs;

- **Stakeholder engagement processes need to be agile and data-driven through the identification of what is feasible within a shorter timeline**. According to the survey abovementioned, the three most impactful measures to secure SLO with local communities are: (1) consulting residents upstream, (2) collaborating with residents' associations, and (3) donating a share of the profits to local associations.

In addition to infrastructure operators, **investors are also in the spotlight** and are expected to fully embrace the emerging concept of **social license to invest (SLI).** To create and strengthen this SLI, financing of infrastructure assets can be leveraged, as long as **the investment strategy is sustainability-driven,** combining three main aspects:

- A long-term perspective: compared to standard private equity investment, infrastructure investment is intrinsically linked to long-term considerations;

- Responsible criteria: investors are increasingly looking to achieve financial returns while performing in terms of extra-financial aspects, such as social, environmental and governance, using international standards and guidelines;

- A multi-stakeholder approach: the financing of an infrastructure project involves various stakeholders, which have their own objectives and constraints but must reach an agreement to fund and carry out the project.

In the era of stakeholder capitalism, creating value cannot be simply limited to maximizing shareholders' interests but should also aim at enhancing a company's value to all stakeholders, now and in the future. To do this, multisector coalitions must be built to align interests between governments, NGOs, companies, and community members[2].

To make the best of this SLO/SLI value potential, the traditional contractual arrangements must integrate a stakeholder-centric and flexible dimension. In infrastructure sectors, public-private partnerships (PPPs) now tend to include sustainability and social goals, in addition to performance objectives.

To accelerate the transition towards SLI, **regulators have a critical role to play by increasing transparency and collaboration** between all actors. For instance, the EU Taxonomy is a precursor tool to guide companies and investors towards a carbon-neutral economy. It could be followed in the coming years by a social taxonomy to pave the way for more inclusive infrastructures.

The need to align stakeholders' interests on each infrastructure project has never been greater. This is in line with Vauban IP's vision of long-term infrastructure investment.

[1] OECD, *"Financing Climate Futures, Rethinking infrastructure,"* 2018.
[2] Five elements must be in place for a collective-impact effort to achieve its aims: (1) a common agenda, which helps align the players' efforts and defines their commitment; (2) a shared measurement system; (3) mutually reinforcing activities; (4) constant communication, which builds trust and ensures mutual objectives; and (5) dedicated "backbone" support, delivered by a separate, independently funded staff, which builds public will, advances policy, and mobilizes resources.

Methodology of the study

This study has aimed to provide Vauban IP with a forward-looking approach to SLO but as well as an opportunity to engage with its stakeholders.

A study combining academic expertise and business insights

- Reflecting Altermind's DNA, this study combines academic expertise with business insights, relying on the review of the existing literature and the outcome of thematic workshops organized with academic experts, managers of Vauban IP's portfolio, industrial partners, investors and lenders.
- Altermind has mobilized its network of academics and experts in order to bring perspective to this study, with a cross-sector approach. They have presented their views and interacted with professionals during four workshops dedicated to (i) the concept of SLO and its relevance for infrastructure, (ii) the methods to build a social license strategy for operators, (iii) the ways financing can strengthen SLO and SLI, (iv) the value that can be derived from social licensing.

A survey conducted by IFOP in five countries on public perceptions of infrastructure projects

Altermind and IFOP conducted a survey in five countries to analyze public perceptions of infrastructure projects and the private sector intervention in this area. Given the complexity of this topic, a specific methodology was designed, based on fictitious cases and role-playing.
Laurent Cordonier, expert in cognitive sociology, contributed to the elaboration and the analysis of the survey.

- The survey was based on a representative sample of around 10,000 citizens aged 18 and over in five countries: France, Germany, Spain, Sweden, and the US.
- The first part of the survey used two fictitious cases in order to identify the different criteria of acceptance and their respective weighting in the building andmaintaining of social licensing for the operator: proximity to the infrastructure, solicitation of the opinion of the population concerned, opportunity for the population to participate in the financing, etc. In each country, 1000 people were questioned for the construction of a tramway in an urban area and 1000 people were questioned for the construction of a heating network in a rural area.
- In the second part, general questions were asked to understand the current state of onboarding of populations in infrastructure projects, and their expectations in the future.

The results of this survey are overall homogeneous and consistent across all five countries and all segments of the population. They confirm the critical relevance of SLO in the infrastructure sector and help identify key levers to get and maintain it.

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SOCIAL LICENSE TO OPERATE, A CRITICAL CHALLENGE FOR INFRASTRUCTURES

Key takeaways

→ The concept of social license to operate (SLO) refers to an informal "social contract" between all stakeholders giving project holders the consent they need to develop, deliver and operate a project, through engaging with stakeholders and aligning interests.

→ To address the critical challenges of our times, the world needs more sustainable and resilient infrastructure – notably in the energy sector – and it needs it now.

→ Although infrastructure assets will have to be delivered urgently and efficiently, this cannot be done at the expense of social considerations: making sure all stakeholders are engaged can prove to be time-saving and cost-efficient.

→ Therefore, corporates and investors are expected to embrace the concept of social license to operate/invest (SLO/SLI), both as a rigorous long-term criterion and a project-management tool.

Social license to operate, a must-have for infrastructures

Infrastructures at a turning point

2020s — THE DECADE TO ACT

The 2020s feature an unprecedented level of global uncertainty. Climate change is a prime and urgent concern, requiring action, in all realms of economic systems. The case for the energy transition has never been greater, as the Ukraine war has sparked new fears around energy security and supply. The world has now dived into a period of scarce natural resources and expensive energy access, which constitutes a major test for infrastructure operators as well as their customers or end-users.

To face those critical challenges, **the world certainly needs more and better infrastructure,** and it needs it now. Given infrastructure's essential missions, continued and additional investments in sustainable and efficient infrastructure will be crucial to build resilient, sustainable and climate-proof economies and societies:

- Infrastructure is the cornerstone of a rapid transition towards a low-carbon economy: infrastructure accounts for 79% of global GHG emissions – mainly from the energy, transport and buildings sectors – and 88% of future adaptation costs are to be spent by 2030[3] ;

- Infrastructure brings vital facilities to citizens that can help mitigate social crises: faced with the prospect of long-lasting economic sluggishness[4], they act as a guarantee for improved living conditions and greater social stability, notably for excluded populations.

Nevertheless, at this stage, there is still a massive investment gap in the sector, with an estimated USD 6.9 trillion required for the next 30 years in the energy sector alone to reach the Paris Agreement's targets[5]. Aging assets must be upgraded and/or rebuilt and new sustainable capabilities (such as solar, wind, and smart grids) need to be introduced.

Make change happen... in the right way

Although massive infrastructure will have to be delivered urgently and efficiently, this cannot be done at the expense of social considerations, in line with the Sustainable Development Goals (SDGs) set out in the United Nations 2030 Agenda[6] :

- Populations, especially end-users, are asking for more involvement in project planning, to ensure infrastructure responds to their needs and those of the people directly impacted by short-term infrastructure costs (people living near worksites, etc.), which can be challenging for public authorities;

- The public is imposing a greater scrutiny on infrastructure organizations across a range of issues which they care about – ethical business practices, environmental stewardships, diversity and inclusion, health and safety, etc.;

- Where the delivery of infrastructure involves substantial disruptions to communities (for instance the impact of long-lasting worksites on everyday life, the rise of taxes to finance the substantial investments required for every infrastructure, etc.), **ensuring public acceptance and support proves to be a time- and cost-saving strategy** for infrastructure projects by preventing blockages, demonstrations and conflicts during the whole infrastructure lifecycle.

In addition, the survey conducted by Altermind and IFOP at Vauban IP's request among the population of five countries confirms the critical relevance of public support in the infrastructure sector, in quite a consistent and homogeneous way.

[3] United Nations Office for Project Services, *"Infrastructure for Climate Action,"* October 2021.
[4] World Bank Group, *"Stagflation Risk Rises Amid Sharp Slowdown in Growth"*, Global Economic Prospects, June 2022.
[5] OECD, *"Financing Climate Futures, Rethinking infrastructure"*, 2018.
[6] European Commission, REPowerEU Plan, COM/2022/230, May 2022.
[7] K. Appunn and J. Wettengel, *"Germany boosts renewables with 'biggest energy policy reform in decades"*, Clean Energy Wire, April 2022.
[8] Principles for Responsible Investment, *"Bridging the gap. How infrastructure investors can contribute to SDG outcomes,"* 2020.

FOCUS 1

REPowerEU: accelerating European decarbonization in response to the energy crisis

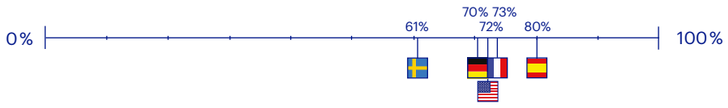
Russia's invasion of Ukraine has heightened energy security concerns and highlighted the EU's dependence on gas, oil and coal imports from Russia. As a result, in May 2022, the European Commission presented the REPowerEU Plan, a roadmap to build a more resilient energy system, accelerating the transition to clean energy. This plan is increasing the pressure to accelerate the pace of decarbonization through energy savings, diversification of energy supplies, and the accelerated deployment of renewables to replace fossil fuels, with dedicated investments of almost €210 billion by 2027[6]. Some European countries have already launched some exceptional measures to accelerate the transition. Germany stands as a case in point. The country has targeted a share of green energy up to 80% of the energy mix by 2030, requiring massive investments in solar photovoltaic installations in order to reach a total capacity of 215 GW[7], compared to 50 GW in 2020.

SURVEY:

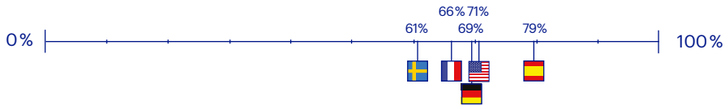
Public support (approval and involvement), a must have for infrastructure projects

Source: IFOP, with Altermind

In all five countries (France, Germany, Spain, Sweden and the US), confidence in a private company to build or operate an infrastructure is high.

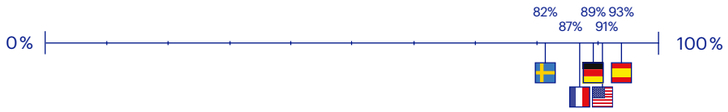


Answers **"Yes, absolutely"** and **"Yes, fairly"** to the question: "in general, would you say you trust a private company with regard to the **design and construction** an infrastructure project?"



Answers **"Yes, absolutely"**and "**Yes, fairly"** to the question: "in general, would you say you trust a private company with regard to the **operation** of an infrastructure project?"

Though, according to the survey in the five countries, more than 80% (precisely between 82% to 93%) of the population feel there is a **need for residents' support in infrastructure projects**



Answers **"Yes, absolutely"** and "**Yes, fairly"** to the question: "in your opinion, should an infrastructure project that has all the legal and regulatory permits also **seek the support of residents?**"

Stakeholder engagement, the building block of a social license to operate

A NEW STAKEHOLDER-CENTRIC ERA

In the last decades, many business leaders have formally claimed to embrace **"stakeholder capitalism"[9],** assuming a long-term corporate purpose that includes all stakeholders' interests and acknowledges the need for balance and compromise.

Facing the challenge of sustainability, capitalism must find ways for actors at all levels of society to **reshape the broken pieces of the global economy and build one that works for all people, and for the planet[10].**

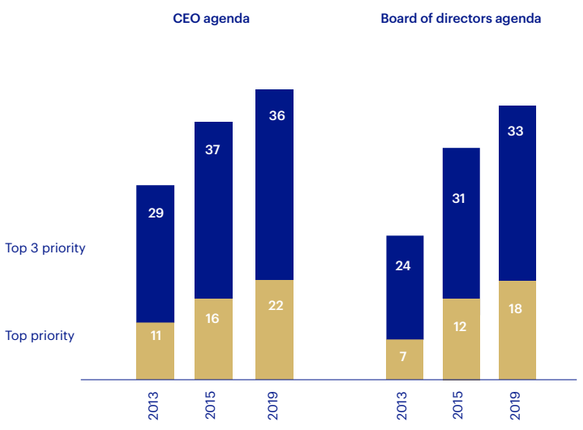
In this stakeholder-centric era, infrastructure companies are also expected to look for external engagement and cooperation from all stakeholders to build a successful social license to operate.

FIGURE 1:

Priority of external engagement on leaders' agendas, % of respondents

Source: McKinsey Global Institute, 2020

Respondents who said "top 10 priority", "not on the agenda", or "don't know" are not shown. In 2013, n=2,186; in 2015 n=1,334; and in 2019 n=1,418



[9]As defined by Klaus Schwab (K. Schwab, *Stakeholder Capitalism: A Global Economy That Works for Progress, People and Planet*, Wiley, 2021), founder and executive chairman of the World Economic Forum, in stakeholder capitalism, the interests of all stakeholders in the economy and society are taken on board, companies optimize for more than just short-term profits, and governments are the guardians of equality of opportunity, a level-playing field in competition, and a fair contribution from and distribution to all stakeholders with regards to the sustainability and inclusivity of the system.

[10] K. Schwab, *Stakeholder Capitalism: A Global Economy That Works for Progress, People and Planet*, Wiley, 2021.

EXPERT POSITION 1

A time for engagement and transparency

"The decarbonization commitments will involve large volumes of time-bound investment, particularly dense in infrastructure (notably energy networks, transport systems, and their adaptation to climate change). 135 countries have set the objective of carbon neutrality and will be subject to such constraints. This will be specifically the case in Europe, with the 'Fit for 55' in 2030 and, in the shorter term, adaptation to the effects of the Russian-Ukrainian conflict.
All these factors make it absolutely crucial to engage communities within a short timeframe and obtain – and maintain over time – a 'social license to operate'; not achieving those objectives will impact the stability of the communities concerned (as well as the economic balance of the projects)."

Patrice Geoffron,
Professor at Paris Dauphine-PSL University

"With the changes in the energy market, and notably the rise in energy prices, stakeholders are asking for more transparency and involvement in the sector. For each infrastructure project, companies must now consider stakeholders' involvement as a best practice or could face massive setbacks in the next decades."

Olivier Guerrini,
VP Biogas Business Unit at TotalEnergies

EXPERT POSITION 2

A "social contract" fit for the 21st century: the role of the private sector

"The social contract is the fundamental set of rules and norms that govern how we live together and how we organize the provision of collective goods in our society. In other words, the social contract defines what we owe each other, whether we are individuals, businesses, civil society or the state. Profound changes in technology and demography are challenging old structures. The climate crisis, the global pandemic and its inevitable aftermath have revealed the extent to which our existing social contract is no longer working. We are at a moment in history when new choices need to be made. It is within our gift to shape a social contract that gives us, and those that come after us, a better future.

Companies in particular should focus on the interest of a broader set of stakeholders, pay special attention to protecting the social contract, by promoting better conditions of living, building resilient, long-term and inclusive infrastructures, and giving everyone the chance to contribute and to develop their capabilities. By doing so they will strengthen their role in the society and maximize their long-term value."

Minouche Shafik, leading economist and Director of the LSE, author of What We Owe Each Other: A New Social Contract Bodley Head 2021

LOOKING BACK AT SOCIAL LICENSE TO OPERATE

The concept of social license to operate (SLO) refers to an **informal "social contract" between all stakeholders giving project holders the consent they need to develop, deliver and operate a project, through engaging with stakeholders and aligning interests.**
In other words, having a social license means stakeholders – public authorities, end-users, local communities, the public, partners, etc. **– trust the organization and will act in line with their interests, beyond complying with legal, regulatory or contractual obligations**.

Coined in 1996 by executives from the mining industries, the social contract initially aimed to highlight that the loss of legitimacy from communities was equivalent to "government refusal to issue permits"[(1)] and that local groups can be important governance actors and can have the power to stop a project from happening.

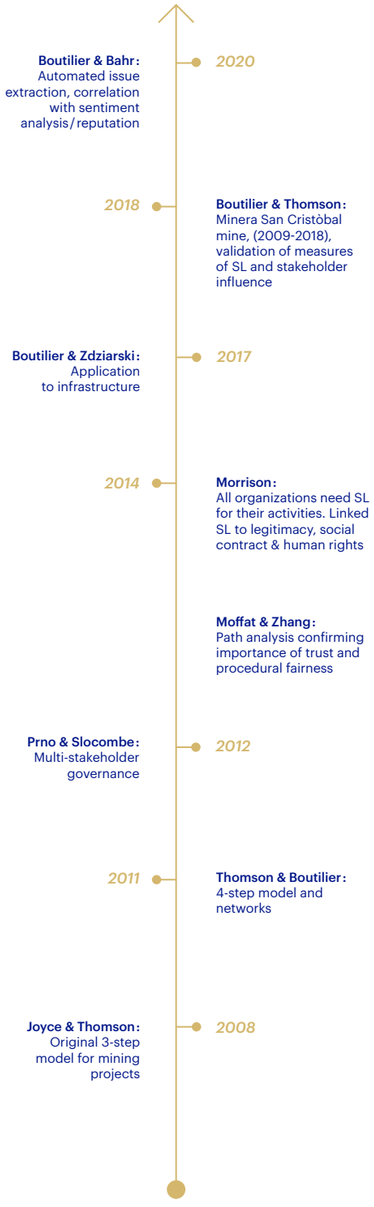
While SLO is not a new concept, its scope has progressively extended to all stakeholders and its relevance today is increasing. Beyond corporates, **light is also increasingly being shone on investors' actions** and their role in exacerbating harm or improving public good. This trend, which concerns all sectors, is underpinned by deeply rooted changes, including the increasing sensitivity to the social impact of business, the changing media landscape with social media, the rise of advocacy groups (both organized and spontaneous), the rise of shareholder activism and the erosion of trust in business and government.

As a result, companies – especially **those with environmental and social impacts** – are increasingly expected to obtain the informed implicit consent of non-market stakeholders (local communities, NGOs etc.) to **avoid repeated episodes of stakeholder conflicts.**

FIGURE 2:

SLO in academic literature

Source: Robert Boutilier



[(1)] R. Boutilier, *"Frequently asked questions about the Social License to Operate"*, Impact Assessment and Project Appraisal, 2014.

EXPERT POSITION 3

Social license to operate: the "real thing"

Robert Boutilier is a leading academic expert and a consultant in stakeholder management theory and practice, author of several books and academic papers on social license to operate

"Originally, the phrase 'social license' was coined separately by two people within months of each other. In October 1996, W. Henson Moore used the term in a forestry magazine article to describe the need to have public acceptance to continue operating. Three months later, James Cooney, an executive within a mining company, used the term in a meeting with World Bank officials to describe the need for community acceptance of mining projects. Moore's version emphasized public opinion and stakeholders like national governments and news media while Cooney's version highlighted community opinion and stakeholders like municipal governments, neighboring residents, and local businesses. In any case, in the mining industry, the term soon became a popular shorthand for practices that win support from communities.

More recently, when the climate change movement gained momentum, international networks of stakeholders started challenging the social license of carbon-intensive energy projects. While environmentalists succeeded in convincing the public that a project had no social license, project proponents dismissed the social license as a meaningless fiction. Conversely, when businesses succeeded in convincing the public that their projects had a social license, activists dismissed the validity of the social license. However, none of the political theatrics have made social acceptance any less important for businesses that introduce changes in a society, especially faced with the climate emergency and the rising social inequalities. Favorable community and public perceptions are both still essential to deliver a project successfully and avoid costly obstacles or outright termination."

Robert Boutilier, PhD,
University of Eastern Finland

SLO, ASIDE BUT PAIRED WITH ESG AND CSR

Considering its content, SLO shares several characteristics with the concepts of **Corporate Social Responsibility (CSR)** – which refers to activities voluntarily undertaken by companies not directly related to financial performance – and **Environmental and Social Governance (ESG)** – which are the criteria used by investors to measure the extra-financial impacts of companies.

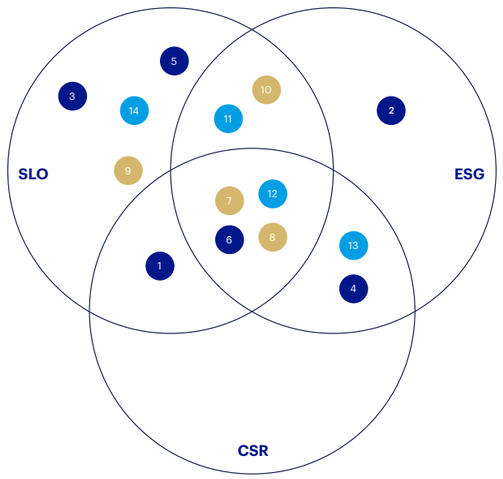
However, **SLO focuses on all stakeholder perceptions and interests in a project-specific and very operational basis,**[12] whereas CSR and ESG approaches are mainly designed to assess objectives and quantitative impacts at an organization's scale. Moreover, while ESG and CSR are based on internal or external criteria, SLO is **granted by stakeholders themselves, making "social washing" harder** (Figure 3).

[12] R. Boutilier, *"A measure of the Social License to Operate for Infrastructure and Extractive Projects"*, November 2017.

FIGURE 3:

SLO, aside but complementary of ESG and CSR

Source: Altermind



Methodology

1	Stakeholder-centric: assessment of perceptions of relationships
2	Shareholder-centric: assessment of objective impacts
3	Project-specific
4	Group level
5	Granted by stakeholders
6	Commitment towards stakeholders

Content

7	Answering social expectations
8	Undertaking environmental actions
9	Fostering economic integration of local communities
10	Strengthening risk mitigation

Function

11	Measurable management tool
12	Legitimization narrative
13	Certification of corporate activity
14	Communities' on-boarding tool

CASE STUDY 1

SLO, a priority for Paprec

The Paprec Group, leader in recycling and actively involved in waste-to-energy activities, has put cooperation with all stakeholders at the heart of its DNA. The solutions developed by Paprec have a major positive impact on the environmentbut this does not relieve the Group from the need to build a strong SLO: stakeholders' approval is a key part of the development strategy of Paprec.

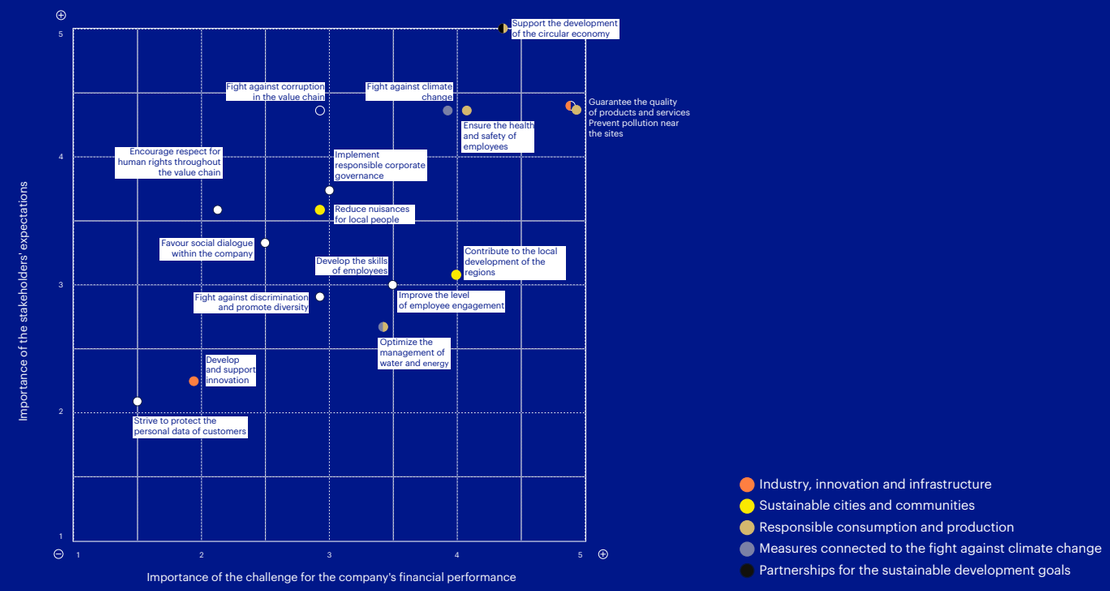
"While our recycling activities are well accepted by local communities, building SLO remains crucial for our waste-to-energy activities, which are indispensable in the value chain but continue to face strong opposition. Considering the nature of this activity, we are daily facing the "not in my backyard" issue and the dioxin affair that led to the closure of a waste incinerator in Savoie in 2001 remains in people's minds. The opening of UVE incinerators is often subject to very strong opposition, even though the technical content of the plants has changed radically and is now more safer than before. As public expectations keep increasing, we have to adjust our infrastructures and better explain all the benefits we bring to the society in the fight against climate change "
(Sébastien Petithuguenin, CEO of Paprec)

The Group's contribution to inclusion in the territories also helps reinforce its SLO by building stronger connections with the local ecosystem (enterprises, prefectures, employment agencies, etc.). Paprec has already welcomed 10,000 school children for education days at its sites and elsewhere to raise public awareness of recycling issues and its professions. Paprec has also pursued its involvement in local employment integration programs (PLIE) in the Île-de-France and Bouches-du-Rhône regions, and its partnership with the Seine-Saint-Denis Chamber of Commerce.

FIGURE 4:

Paprec materiality matrix, revised in 2020

Source: Paprec Sustainability Report, 2021



Social license for infrastructures, hard to get… easy to lose

Don't get a social license, maintain and build on it!

A MOST COMPLEX EQUATION

The inherent characteristics of infrastructure can make stakeholder engagement and social licensing a very hard challenge:

– Infrastructure assets feature broad and complex environments of stakeholders, characterized by wide-ranging geographic footprints but differentiated impacts. They bring together a variety of stakeholders with diverging initial interests and expectations and managing stakeholders' needs often varies according to projects, territories, cultures, times and types of infrastructure (physical, digitalized, etc.);

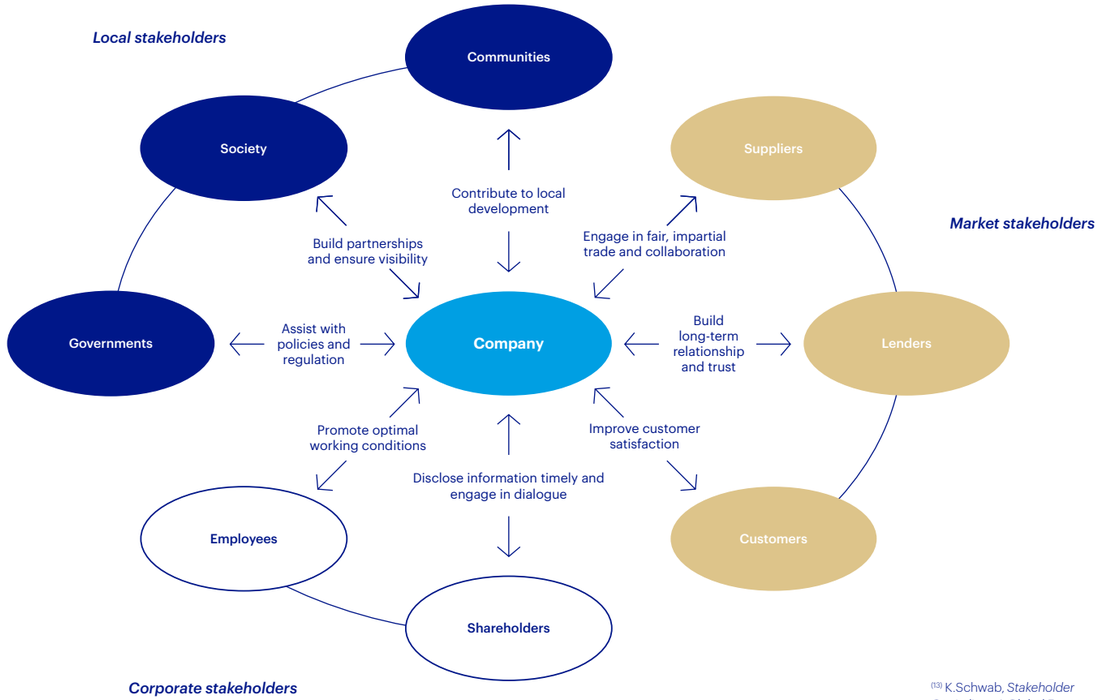
– Infrastructure is the asset class with the longest lifecycle: from the earliest stage of planning to the exit or decommissioning phase, infrastructure projects often span over a few decades. As the range of stakeholders involved increases and their expectations evolve over time, ensuring efficient stakeholder engagement can prove to be particularly difficult;

– Infrastructures often have wide public exposure: local communities, in addition to broader society, might oppose or support a project for different reasons, and a local project might end up at the center of nation-wide attention.

FIGURE 5:

An ecosystem of stakeholders with diverse expectations

Source: Altermind, inspired by K. Schwab [13]

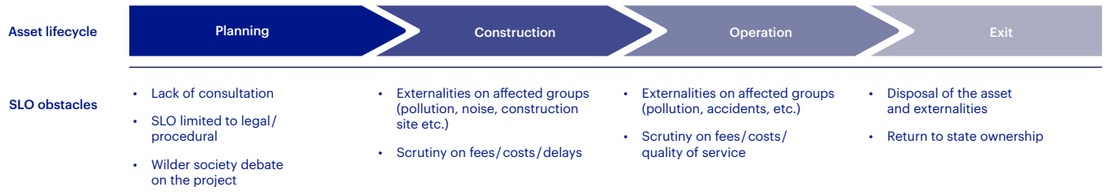


[13] K.Schwab, *Stakeholder Capitalism: A Global Economy That Works for Progress, People and Planet*, Wiley, 2021

FIGURE 6:

SLO obstacles at each stage of the infrastructure lifecycle

Source: Altermind



FOCUS 2

The costs of lacking SLO

THE NOTRE DAME DES LANDES AIRPORT PROJECT

Vinci Airports was granted a concession contract in 2010 to build and operate an airport in the West of France, but the site was soon occupied by protesters opposing the project due to its effect on the local environment and the wider implications of the air transport sector on greenhouse gas emissions. In 2012, 200 protestors stayed on site and established a camp from which policemen failed to dislodge them in 2012, attracting nationwide coverage in the media.

The French Government abandoned the project in 2018 despite the fact that a local referendum showed 55% of residents accepted the project, 179 court decisions ruled in favor of the project, and expert studies highlighted the benefits expected from the future airport. The financial implications were important for all the stakeholders involved.

TOKYO'S NARITA INTERNATIONAL AIRPORT

When the construction of the airport started in the late 1960s, local farmers, residents, and left-wing groups (and later the student movement) reacted by forming a citizen movement, commonly known as the Sanrizuka struggle. The struggle stemmed from the government's decision to construct the airport in Sanrizuka without the involvement or consent of most area residents and led to violent protests and battles, leading to deaths and mass arrests. The government was eventually able to secure the construction site using financial compensation and State power to expropriate the remaining necessary land. Opposition against the airport has continued from splinter groups since the 1970s: over 500 guerrilla actions have taken place against Narita airport since its opening in 1978.

NORTH RIVER WATER POLLUTION CONTROL PLANT ("THE PLANT")

The North River Water Pollution Control Plant, also called "the Plant", is a controversial project initiated in the 1960s in West Harlem, New York City. With giant investment required for the construction, following those needed for the adaptation to mitigate its impacts, the project is still contested and remains an example of lack of consultation and breach of trust with local stakeholders.

When the West Harlem neighborhood was designated, opposition to the project immediately became apparent. To calm down the claims, the Federal State and the City proposed a major investment in the construction of a 28 acre park atop the Plant to make the project acceptable. However, the Plant began to have a number of environmental impacts after its commissioning, and after several legal actions, public authorities were compelled to fix the Plant and compensate local stakeholders for health and financial damage.

Key SLO takeaways from those cases

→ A "legal" license (permit) is not enough in the face of structured opposition from "civil" stakeholders (NGOs, local communities etc.);

→ Any community, even a lowly-structured one, can fight a project efficiently if it feels disproportionately affected by it;

→ The time to market can be key: a project that lasts a long time can face an evolving and uncertain environment, therefore putting at risk its SLO;

→ Structured opposition can arise outside from local communities, with equally if not stronger influence on decision-making;

→ Large infrastructure projects must also factor in the general public, especially when such topics can quickly become national news, which in turn helps lobbying efforts undertaken by opponents to the project;

→ The loss of SLO can lead to violent reactions against the infrastructure itself.

HIGH STAKES IN PLAY FOR ALL

Infrastructure developers, managers and operators cannot disregard this challenging equation as failure to meet stakeholders' expectations poses a threat of asset loss, high costs, reputational harm and opportunities to develop beneficial partnerships for all parties:

- Losing a social license truly becomes an issue **when a damaging event goes public:** media coverage publicly contests the company's principles and communication, revealing conflicts between the mediatized event and stakeholders' expectations. The social license is therefore dynamic by design: it can rise or fall daily;

- **SLO varies depending on each stakeholder,** and oppositions may come from various stakeholders – a project may face a SLO issue from society even though it benefits from local support, and vice versa;

Beyond this defensive view of SLO, **getting and maintaining a social license can foster many benefits for all stakeholders, maximizing the impact of an infrastructure project and enhancing the attractiveness of a project or a company.**

The need for a project-centric management mindset

ASSESSING SOCIAL LICENSING

Many theoretical frameworks have been developed to assess the ongoing acceptance of a company's business practices and operations by its stakeholders[14]. The cornerstone of these frameworks lies in the three "must-have" components to build a social license[15]:

— **Legitimacy:** the extent to which a company plays by the "rules of the game", i.e. the norms of the community, mainly legal, social, cultural, formal or informal in nature;

— **Credibility:** the company's capacity to provide true and clear information to the community and fulfil any commitments made;

— **Trust:** the willingness to be vulnerable to the actions of another.

In collaboration with Robert Boutilier, and on the basis of previous academic works from Thomson (2011), Luke (2017) and Lesser (2020), Altermind has developed for Vauban IP the following analytical framework to assess the degree of social licensing – from the point of view of stakeholders – associated with a project (Figure 7).

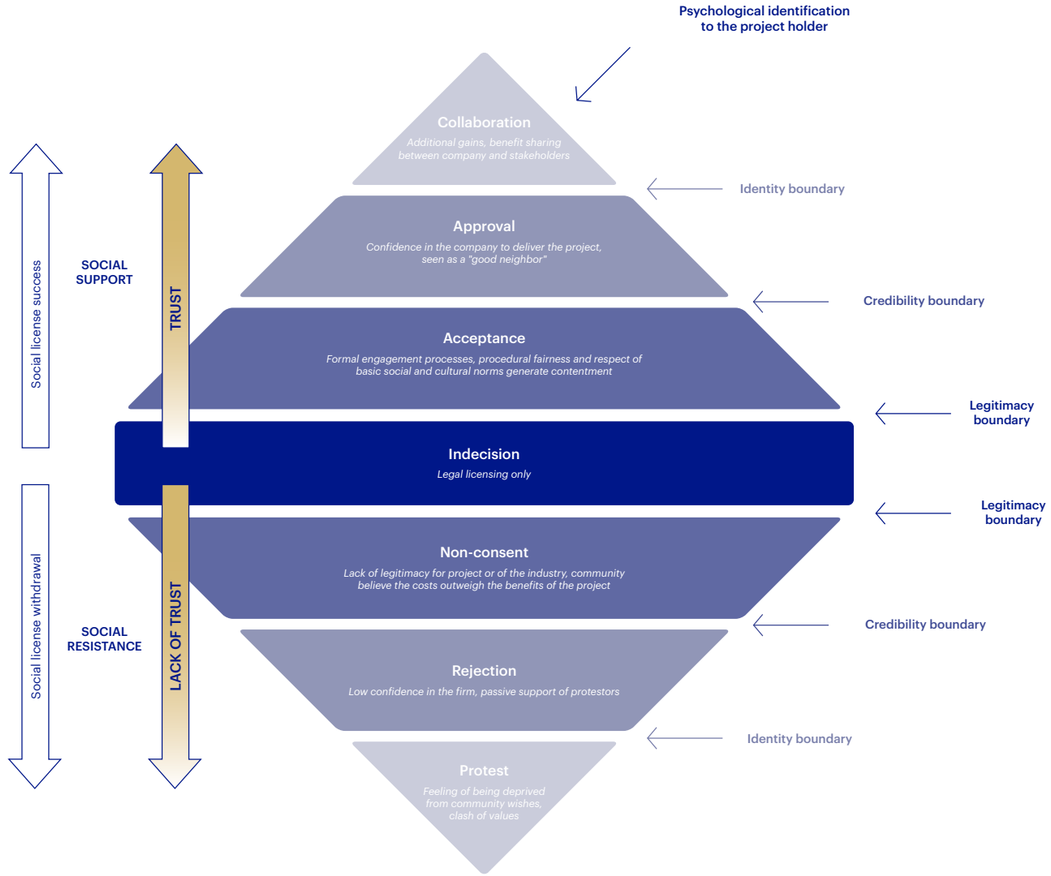
[14] Robert Boutilier notably created a reference framework to visualize the requirements for holding a social license, based on a comprehensive and project-centric approach of engagement, which was later extended by Luke in 2017 to include the scenarios of social license withdrawal, and then by Lesser in 2020 who introduced a community/society difference and indicative metrics.

[15] R. Boutilier, I. Thomson, *"Modelling and measuring the social license to operate: fruits of a dialogue between theory and practice"*, 2011.

FIGURE 7:

A diamond framework to assess the level of social licensing, from the stakeholders' standpoint

Source: Altermind, with Robert Boutilier, inspired by Boutilier, Thomson (2011), Luke (2017) and Lesser (2020)



USE SLO AS A PROJECT-MANAGEMENT AND DEVELOPMENT TOOL

Due to its operational and multiple application scopes, assessing stakeholder engagement has become a performance metric for infrastructure project holders due to its operational and numerous other applications:

-It serves as a **risk assessment model,** enabling the measurement of acceptance by local communities;

– It provides the basis for designing an **actionable roadmap for stakeholder management** and enhancing the legitimacy of a project, both among directly impacted stakeholders and the general public;

– It can be leveraged by a company to build an **evidence-based legitimization narrative,** with potentially major reputational benefits improving its relationships with all stakeholders.

FOCUS 4

The San Cristóbal mine (Bolivia): SLO as an effective management tool[16]

Developed in the early 1980s, the San Cristóbal mine came into full operation in 2007. The evolution of stakeholders' acceptance of the mine in the late 2000s shows that SLO, as a management tool, is fundamental to efficient stakeholder engagement.

In 2009, stakeholders of the mine were divided in two separated clusters, with very few interconnections between supporters and opponents of the mine. Most of the support for the mine came from the nearest villages, where mine workers lived (left side), while opposition partly stemmed from a group of traditional agriculture-oriented organizations (right side), which felt left behind.

As field interviews and stakeholder mapping revealed both inhabitants from the mining villages and traditional agriculture-oriented organizations aimed at spreading prosperity more equally across the region, an inclusive regional economic development initiative was conducted to bring opposed stakeholders closer together.

In two years, the regional economic development initiative allowed for drastic changes among the network of stakeholders: the strongest opponents of the mine in 2009 became the strongest supporters, and their influence helped raise the overall social license level. Collaborative ties between mining villages and other organizations significantly increased, thus reducing sociopolitical risk.

The social capital generated through the regional development plan fostered higher social license for future common projects: an occupation of the mine in 2011, far from entailing a withdrawal of the social license, brought to the forefront the desire for improved equality in access to health care among the community, facilitating a collaborative initiative to obtain a regional hospital, eventually constructed in 2018.

The San Cristobal case is interesting to analyze as the mining sector is a precursor in terms of SLO and shares similarities with the infrastructure sector. In 2015, a study conducted interviews with industry representatives from the energy sector (wind, carbon dioxide capture and storage, and geothermal) to provide a comparison of views on the understanding and application of SLO in these industries; the findings identified shared expectations of increasing stakeholder engagement in energy project development, and a view that a SLO could guide this engagement.[17]

[16] R. Boutilier and I. Thomson, *The Social License: The Story of the San Cristobal Mine, Routledge,* 2019.
[17] N.Landsbury et al., *"Social License to Operate: Understanding how a concept has been translated into practice in energy industries"*, Journal of Cleaner Production, 2015.

FIGURE 8:

The San Cristobal network of stakeholders in 2009

Source: R. Boutilier

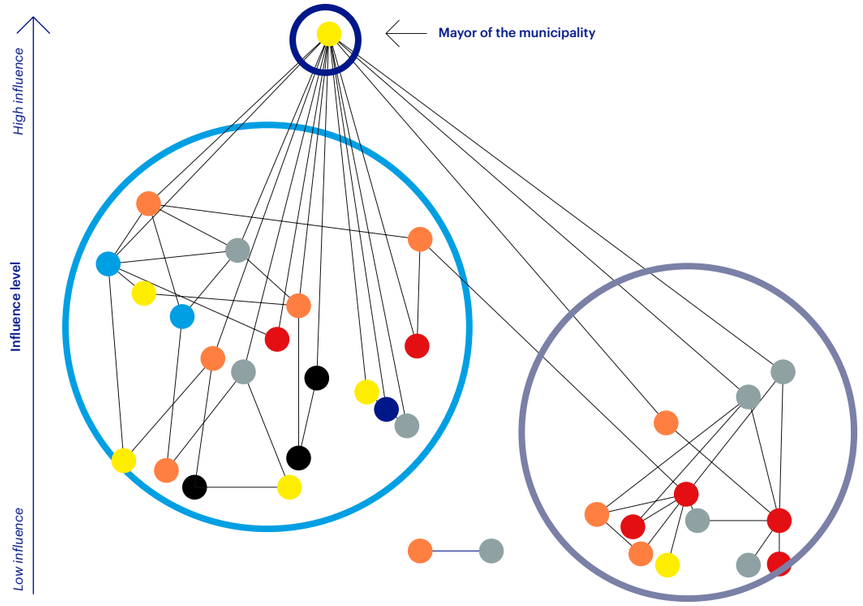
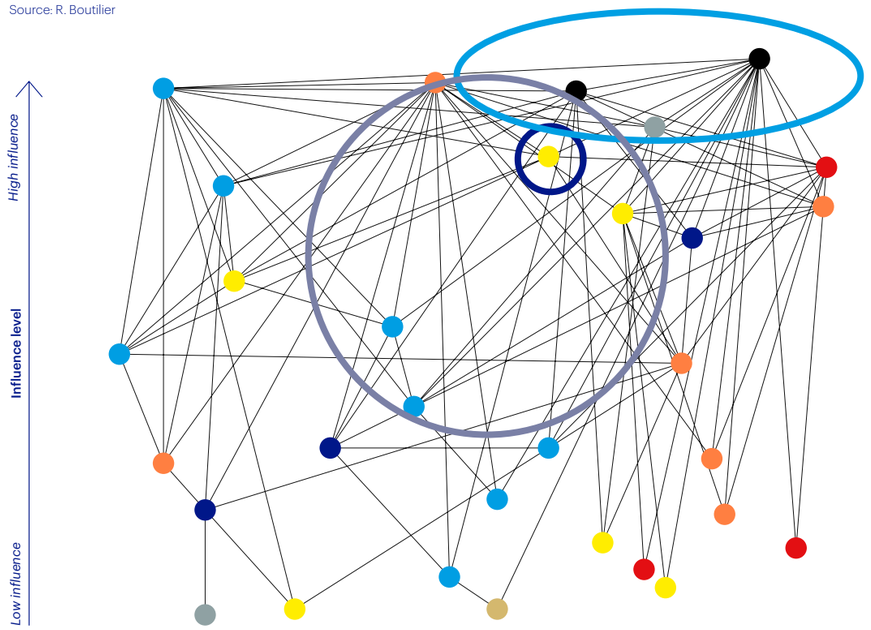


FIGURE 9:

The San Cristobal network of stakeholders in 2011

Source: R. Boutilier



Level of social license granted

- psychological identification
- high approval
- low approval
- high acceptance/tolerance
- low acceptance/tolerance
- withheld/withdrawn

Collaborative relationship

STAKEHOLDER MAPPING, ENGAGEMENT AND EMPOWERMENT: BUILDING A PRAGMATIC ROADMAP FOR SLO

Key takeaways

→ Mapping stakeholders' interests in a dynamic way is the building block of social licensing, as it enables us to get a comprehensive and granular vision of tensions and opportunities and stay-up-to date with stakeholders' evolving expectations.

→ A stakeholder engagement strategy should start from the very early stage of project planning when there is a larger scope for successfully influencing options and implementing changes responsive to communities' needs.

→ Effective community participation should be a prime concern for infrastructure project holders and requires encouraging both formal and informal processes all along the infrastructure lifecycle.

→ According to the specific survey conducted for the purpose of this report, from citizens' standpoint, the three most impactful measures to build SLO are (1) upstream consultation, (2) the participation of local residents' associations, and (3) giving back part of the profits to local associations.

→ Maintaining a positive SLO – very fragile by design – can be enhanced by digital technologies, including the most cutting-edge (digital twins, etc.).

Stakeholder mapping, a first step

The necessity to map infrastructure stakeholders

"KNOW YOUR STAKEHOLDERS" (KYS)

The very nature of infrastructure projects fosters multiple opinions and diverging perceptions of stakeholders: different stakeholders could perceive the infrastructure project as having negative impacts. Mapping stakeholders' interests is thus a crucial first step to get a more granular understanding of the different opinions.

Although stakeholder mapping is about visualizing stakeholders and understanding what they expect from a project, it must be conducted with **a dynamic approach.** Managers must know about entities in their environment that hold power, have the possibility to impose their will upon the firm[18] or the capacity to facilitate future developments. Figure 10 presents a method for classifying stakeholders according to their interests, history and influence, which can help infrastructure project managers identify how they should engage with the ecosystem, where the primary focus of attention should be on what preemptive actions must be implemented.

[18] Mitchell, R. K., Agle, B. R., & Wood, D. J, *"Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts"*, Academy of management review, 1997, 22(4), 853-886.

SURVEY

Mapping expectations, a critical starting point

Source: IFOP, with Altermind

The degree of support varies depending on the infrastructure project: this calls for a granular and dynamic mapping of stakeholders and their perceptions beforehand.

- Initial support significantly varies between residents (i.e. people directly impacted by worksites: for instance residents or shopkeepers in a street where the tramway will go by) and non-residents (i.e. people indirectly impacted: for instance people living in another neighborhood but who will be impacted by expected traffic jams, decreased number of parking spots due to worksites).

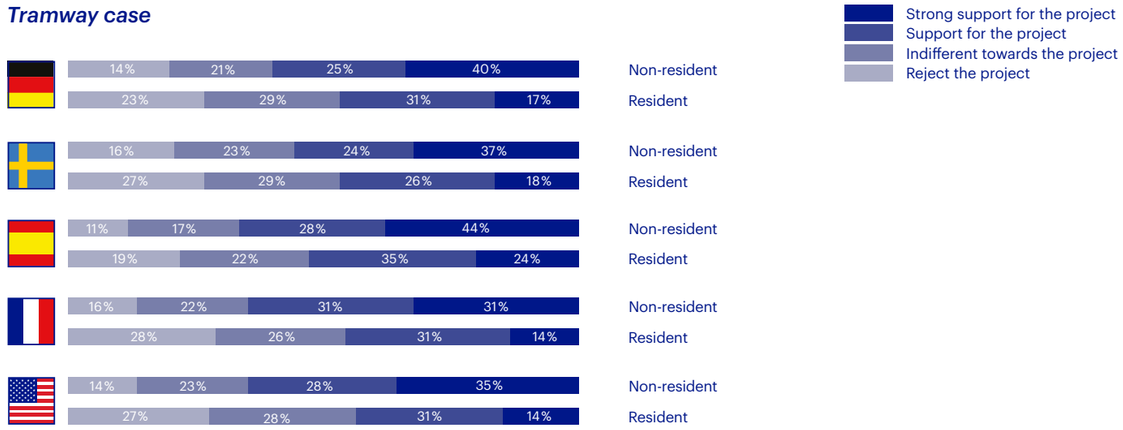
- Also, initial support varies significantly depending on whether the project generates direct disturbances and/or future benefits on everyday life: the survey shows there is stronger support from non-residents for the tramway case (probably because they will be marginally impacted by worksites and will benefit from the service afterwards) than for the heating network (probably because they will not benefit from the service afterwards).

- Infrastructures has a long lifetime and perceptions of a project can evolve over time depending on various factors: the survey shows that delays or malfunctions can significantly decrease public support (see below).

Answers the question:

How would you feel about the tramway project if you were a resident *that will benefit from the tramway (but will suffer directly from the disturbances du to worksites) and if you were a non-resident who will also benefit from the tramway and will be only indirectly impacted by worksites?*

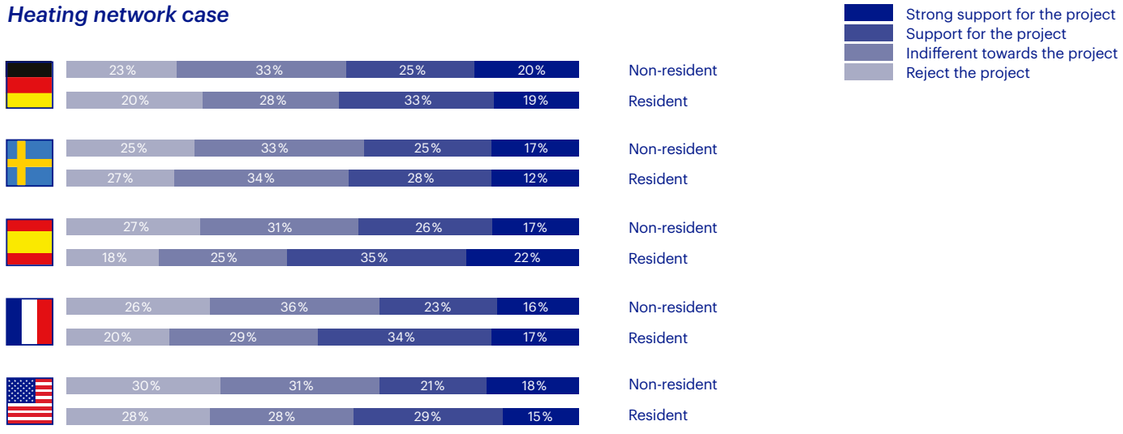
Tramway case



Answers the question:

How would you feel about the heating network project if you were a resident *that will benefit from the HN (but will suffer directly from the disturbances due to the worksites) and if you were a non-resident who won't benefit from the HN and will be only indirectly impacted by worksites?*

Heating network case



A well-designed mapping strategy should also be construed as an effort to map "known-unknowns" in a risk and opportunity assessment perspective. For instance, beyond direct stakeholders, a project might also attract nationwide attention when non-stakeholders, or potential stakeholders, intervene in the public debate. As such, mapping non-stakeholders should be seen as a reminder that any group, formal or not, can become a stakeholder.

INCLUSIVE MAPPING FOR INCLUSIVE INFRASTRUCTURE

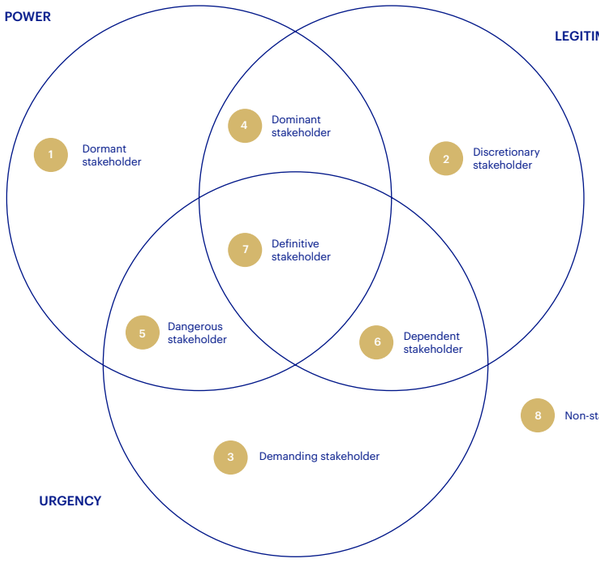
Traditional stakeholder mapping and engagement will tend to identify the stakeholders with the most influence on the implementation of an infrastructure project, or those who are most impacted by it. This approach may, however, overlook persons, groups, communities or organizations that are at risk of being under-served or excluded during the development and implementation of the project.

Approaching stakeholder mapping with inclusivity in mind increases the credibility of the project developers and/or owners. Indeed, stakeholders who are the most vulnerable and at risk of not being given an opportunity to share their expectations and opinions should be given special attention throughout the stakeholder engagement process.

FIGURE 10:

Stakeholder attributes for major infrastructure projects [19]

Source: Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997)



1 ***Dormant stakeholders***
- Power to impose their will
- Power remains unused when there is no legitimate relationship or an urgent claim

2 ***Discretionary stakeholders***
- Process legitimacy, but have no power to influence and urgent claim
- No pressure to engage in a relationship

3 ***Demanding stakeholders***
- Exist where the sole stakeholder relationship attribute is urgency
- Have usually urgent claims but neither legitimacy or power

4 ***Dominant stakeholders***
- Powerful and legitimate
- Form a dominant coalition with influence in the relationship

5 ***Dependent stakeholders***
- Have urgent and legitimate claims but depend on others to carry them out
- Are advocated through the values of others

6 ***Dangerous stakeholders***
- Possess urgency and power but no legitimacy and maybe coercive or dangerous
- Use of coercive power often accompanies illegitimate status

7 ***Definitive stakeholders***
- Possess all three attributes
- Has a direct concern with the project and can be a "game-changer"

8 ***Non-stakeholders***
- Possess none of the attributes

NB: power can be defined as access to the means of influencing another entity's behavior, including the firm (in a coercive, utilitarian or normative way); legitimacy is based on a stakeholder-manager relationship as an entitlement to claim something; urgency is a perception of the seriousness of a claim depending on the timeframe. In brief, power gains authority through legitimacy, and it gains exercise through urgency. Legitimacy gains rights through power and voice through urgency. In combination with legitimacy, urgency promotes access to decision-making channels, and in combination with power, it encourages one-sided stakeholder action.

[19] Mitchell, R. K., Agle, B. R., & Wood, D. J, *"Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts"*, Academy of management review, 1997, 22(4), 853-886.

EXPERT POSITION 4

Alignment between stakeholders' interests

Although stakeholders often have conflicting interests, opportunities for partnerships can arise and be a game-changer during an infrastructure project.

"At SNCF, we have the ambition to gain the approval and collaboration of all stakeholders, including initial opponents. As part of our SLO approach, we consider officials – and especially mayors – as key relays for us to gain and maintain stakeholder engagement and help us align a maximum of interests. When the pressure from local communities is too high, we also try to multiply the relays at a regional level. At the national level, we have created a national committee that brings together several types of stakeholders (officials, user representatives, NGOs, experts, economists, etc.) to get a deeper understanding of their expectations and discuss long-term strategy in a collaborative way."

Pierre Hausswalt,
Head of strategy
and transformation
at SNCF

"For companies, a key issue is identifying how to better manage industrial partnerships to get the best solutions for civil stakeholders."

Fernando Praxedes, Director
of Concessions COMSA

CASE STUDY 2

Telefónica: connectivity for better inclusivity

A —

As a committed Telco operator deploying digital networks, Telefónica has established its own digital inclusion goals and has therefore been recognized as a world leader of digital inclusion by the World Benchmarking Alliance.

In 2019, the company created "Internet Para Todos" (IPT), which aims at connecting remote Peruvian villages to the Internet. The project has already connected more than 2.5 million Peruvians, representing more than 13,700 communities. By connecting remote areas to 4G, Telefónica helps bridge the digital divide, which is substantial in the country: IPT enables Peruvians to access services they were previously excluded from (telemedicine, online entertainment, etc.).

The inclusive ambition of Telefónica goes beyond the deployment of digital infrastructures in remote areas. In Peru, the firm not only provides physical means to access education, but also makes available educational content for youth. "ProFuturo" is an innovative solution providing teachers with high-quality educational material on an online platform.

"Our social license approach is project specific. We do not have a systematic process for stakeholder engagement but we make a thorough analysis upstream to deliver a tailor-made operational plan downstream and involve the whole local ecosystem. At every step, we make sure we understand local communities' expectations, the way people work, the way they live… We then talk to local stakeholders to present and explain the benefits of our solutions. Only after all this preliminary work we start to deploy our solutions."

Jose Maria Bolufer Francia, Head of Sustainable Innovation at Telefónica

The need for a systematic and efficient stakeholders mapping process

A FOUR-STAGE APPROACH TO STAKEHOLDER ANALYSIS

The following four-stage structure gives a concrete proposal for mapping preparation[20]:
→ **Participation analysis:** an overview of the stakeholders and their interests, and implications for the project planning;
→ **Problem analysis:** identification of potential needs for each category of stakeholders;
→ **Objective analysis:** restating the challenges into realistically achievable goals with clear defined outcomes;
→ **Alternative analysis:** identification of objectives and assessment of alternatives according to resources, political feasibility, cost-benefit, social impacts, time horizon, etc.

STAY UP TO DATE WITH STAKEHOLDERS' INTERESTS

Stakeholder mapping should happen at the beginning of the project and be constantly enriched and adapted. Comparing the expected positioning of stakeholders and their current position will then foster a critical discussion of what went well or wrong, as well as how to redress or improve performance.

"Social learning" – a process through which companies accumulate social intelligence about their stakeholders – constitutes a very agile approach that allows stakeholder engagement to be more efficient, in that not every stakeholder requires the same type of engagement and discourse.

OPTIMIZE DATA COLLECTION WITH DIGITAL TECHNOLOGIES

Digitalization is a growing opportunity for stakeholder mapping to be more precise, and for a more refined understanding of local specifics. New technologies allow for optimized data collection (with artificial intelligence or online surveys) of different stakeholders' needs, which in turn enables the evaluation and inclusion of their changing needs and perceptions at the earliest stage of the project design.

EXPERT POSITION 5

Stakeholder mapping: an evolving and agile process

"Stakeholder mapping needs to be conducted as early as possible as interests and hierarchies between stakeholders are different depending on the project, influencing the government approach."

Fernando Praxedes, Director of Concessions at COMSA

"Consideration paid to stakeholders differs depending on the timing. In the case of companies having delegations from local authorities, the first step is to identify the concerns of local authorities, which mainly focus on 'visible' issues, before addressing users' basic expectations."

Patrick Jeantet, Senior Advisor at Vauban IP

[20] E. Ochieng, A. Price, D. Moore, *"Major Infrastructure Projects: Planning for Delivery,* Palgrave", 2017

CASE STUDY 3

ALiS: building on the inclusive nature of highways

Highways are, by nature, inclusive infrastructure evolving in a large ecosystem. They contribute to the reduction of the geographical exclusion of populations, especially in rural areas. By opening up territories and including multiple actors, highway concessions have an increasing role to play in this dynamic of integration and partnerships between the infrastructure and its ecosystem. ALiS is a concessionaire with 82 employees based in the Eure and Orne departments, covers 125km of highway and fully assumes its local role.

Besides participating in several initiatives for local development, ALiS has proactively supported the public authorities in their action to ban HGV transit through the municipalities. To accompany this ban and to encourage customers to use the highway, ALiS has proposed a discount of 13% (maximum discount allowed by the European Directive) on the toll rate to vehicles class 3 and 4 (lorries) carrying out at least three journeys in the same calendar month.

By supporting the local authority's initiative, drastically reducing HGV traffic in surrounding communities, ALiS has gained in legibility as a key local player.

"Social benefits and better inclusion of the public can be directly observed on the ground. We hear positive feedback from local players & beneficiaries, and maintain close relationships with local representatives who are more and more willing to work with us".

Antoine Treboz,
Executive Director of ALiS

CASE STUDY 4

ENGIE: a digital approach to stakeholder mapping

E

ENGIE's experience has shown that the key ingredients for the success of an infrastructure project are not only technical solutions, but also political will and local buy-in. Therefore, dialogue and consultation are essential. ENGIE has internally developed the Stakeholder Suite, a digital platform to develop and support our social license to operate and ensure that our stakeholders view ENGIE as a partner.

It includes:

- A dynamic map showing stakeholders and the links between them;

- An AI-based text analysis to identify and categorize stakeholder concerns;

- A list of the means (press, social networks, etc.) available to ENGIE to engage its stakeholders;

- An analysis of the project with regard to the United Nations Sustainable Development Goals;

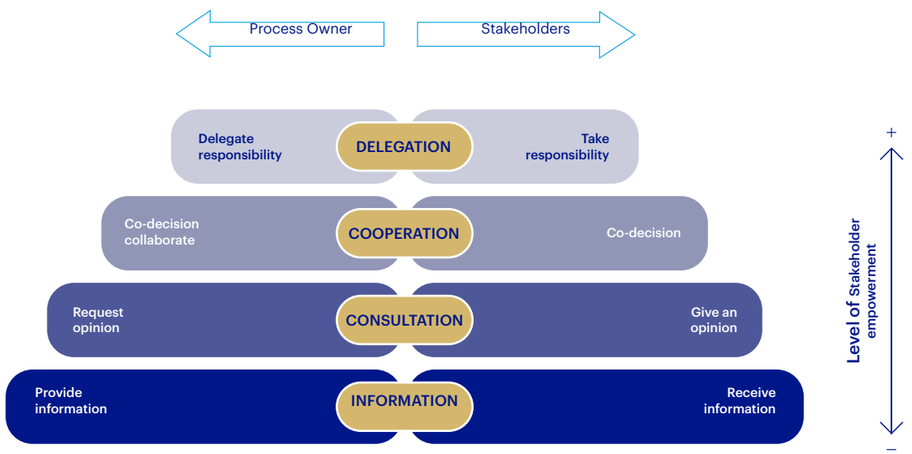
- A dashboard to support and manage Group Advocacy; schematic visualization of local policies and the contribution of our project;

- A module for calculating our financial and reputational exposure.

FIGURE 11:

A stakeholder empowerment scale : finding the right level of participation

Sources: *Global Infrastructure Hub, 2019, J-Y. Rau et al., Terrigenous Mass Movements, 2012*



Build a SLO roadmap to secure the right level of engagement

Use engagement to reach better decisions and build stronger partnerships

INVOLVE STAKEHOLDERS WITH PRAGMATISM

A robust stakeholder engagement and communication plan requires a pragmatic approach to secure the right level of participation and decision-making power for external stakeholders, with the final goal of "reaching better decisions":

- **Guarantee adequate understanding of the infrastructure's stakes and specificities :** the information phase does not actually provide the opportunity for public participation, but rather provides the public with the information they need to understand the firm's decision-making process;

- **Ensure stakeholders' opinions are considered:** consulting the public provides a simple opportunity for its participation as public input is received and feedback is provided to inform how it influenced the final decision;

- **Cooperate with stakeholders :** the public is directly involved in the decision process, usually from the beginning, and is provided multiple opportunities for input as decision-making progresses;

- **Collaborate – sometimes delegate – with stakeholders** to directly engage them in decision-making and share responsibility for the success/failure of the project.

The lack of consensus between stakeholders can have a negative impact on the project and the future of their relationships. **Stakeholder engagement must be well-targeted,** carefully planned upstream according to the type of infrastructure, and tailored to the process with the right level of empowerment. Any empowerment method should be considered as a step towards alignment of interests between project owners and stakeholders. **However, the final decision should always remain in the hands of project holders.**

MAKE PUBLIC PARTICIPATION EFFECTIVE

Effective community (and sometimes society)[21] participation should be a prime concern for infrastructure project holders.

The public's demand for more involvement from the planning stage to operation can enable project holders to gain a better understanding of the community's needs and aspirations, to diversify their perspectives on decision-making, to identify roadblocks, and even to create a greater sense of community ownership.

- International conventions have long established the principle of public participation in infrastructure projects, allowing signatory States sufficient flexibility to define their own implementation terms. **A citizen's right to participate in decision-making for environmental matters has been legally recognized in the UN-initiated Aarhus Convention (1998).** As a result, several countries such as Germany, Poland, and Spain have formally involved the public in the infrastructure pre-planning phase by allowing citizens to comment on the drafts of pluriannual infrastructure planning laws.

- However, a high level of local community engagement throughout various stages of the project's design process do not guarantee the comprehensible participation and empowerment of the public. It is therefore essential **to encourage stakeholder engagement in both formal and informal processes** along the entire infrastructure lifecycle. This is particularly significant regarding upstream engagement during the planning phase where informal "communication" can take two forms:

- **One-way communication channel with no reciprocity:** email updates, informative websites, press releases, public meetings or hearings, advisory committees, ads and newsletters;

- **Two-way communication channel requiring concrete interactions:** brainstorming sessions, open meetings, interviews, door-to-door, citizens' assemblies, online collaborative monitoring platforms, workshops, formal/informal chats.

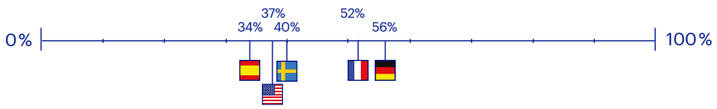
SURVEY

Importance of involving residents in the realization of an infrastructure project

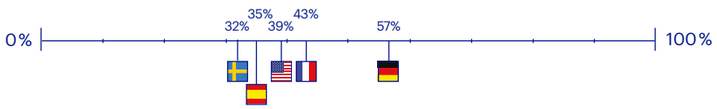
Source: Altermind, with Robert Boutilier, inspired from Boutilier, Thomson (2011), Luke (2017), and Lesser (2020)

Involving residents upstream is perceived as "essential" – the highest possible response – for a large proportion of respondents to the survey, especially in Germany but less in Sweden and Spain

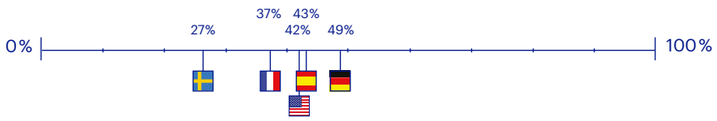
*Answers **"essential"** to the question: "in general, how important you think it is that local residents are involved in the **design** of an infrastructure project?"*



*Answers **"essential"** to the question: "in general, how important you think it is that local residents are involved in the **construction** of an infrastructure project?"*



*Answers **"essential"** to the question: "in general, how important you think it is that local residents are involved in the **operation** of an infrastructure project?"*

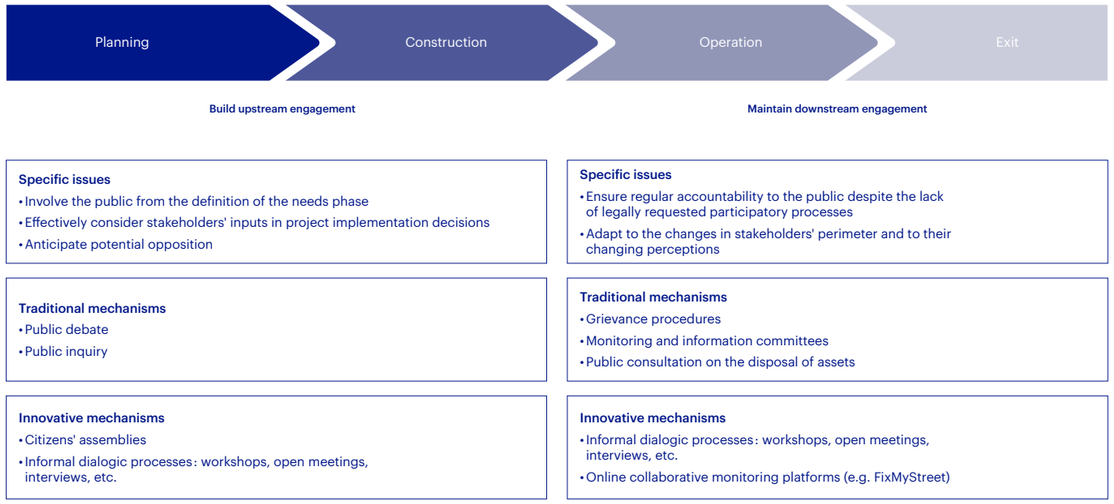


[21]Society refers to a system or network of relationships that exists among individuals in a large territorial scale whereas community refers to a group of individual living within a definite locality with some degree of we-feeling.

FIGURE 12:

Traditional and innovative mechanisms for public participation

Source: Altermind



Toronto's Quayside and Vienna's Aspern Lakeside projects are opposite examples highlighting the critical importance of enabling continuous public participation in tech-intensive infrastructure projects, notably smart cities. On the one hand, completion of the future "smart city" in Vienna is scheduled for 2028; the project is being carried out according to the expected schedule, with increasing support and involvement of the public (drafting of the Master Plan, guidance sessions in so-called "City Labs", etc.). On the other hand, the smart city project conducted by Alphabet's subsidiary Sidewalk Labs in Toronto in 2017 was abandoned in May 2020, partly due to lack of consideration of stakeholders concerned with data privacy and lack of tailored informal processes allowing for accountability to the community.

Guidelines on creating a robust social license roadmap

ENGAGE THE RIGHT STAKEHOLDERS, AT THE RIGHT TIME, AND WITH THE RIGHT TOOLS

Securing a long-lasting Social License to Operate requires both a long-term and flexible approach that matches changing societal expectations and the lifecycle of the infrastructure. As various issues will emerge at each stage of the infrastructure project, public participation must continue throughout the project's lifecycle, offering opportunities for operators to adjust project specifics and to receive feedback for future designs.

In addition, **stakeholder engagement processes need to be agile as they must identify what is feasible within a shorter timeline:** it is important not to accumulate upfront processes and then ignore stakeholder engagement in the following phases. Assessing who to address, when, and how, is a priority.

SURVEY

The winning ticket: consult, associate and give back

Source: IFOP, with Altermind

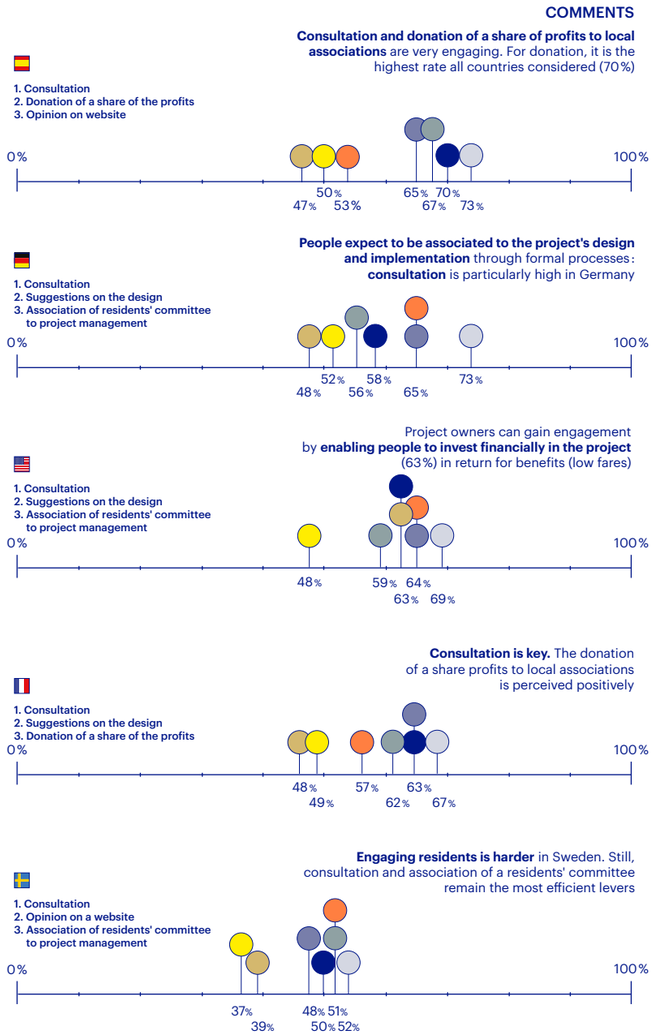
- The three most impactful measures for the public to build SLO are upstream consultation, the participation of local residents, and the donation of a share of the profits to local associations. Regardless of the infrastructure (heating network or tramway), upstream consultation is the most impactful proposal in all countries as it provides communities with the possibility to make proposals on the design and to give their opinion throughout the project via a dedicated website. The sharing of benefits with local associations also has a significant positive impact, particularly in France and Spain.

Tramway case

*Answers **"Yes, absolutely"** and **"Yes, fairly"** to 7 options proposed for the question "As a resident of the street directly impacted by the disturbances of a tramway building (work-site, difficulty to park on your street, noise, etc.), would you be more supportive of the project if...?"*

TOP-3 ENGAGEMENT MEASURES PER COUNTRY

COMMENTS

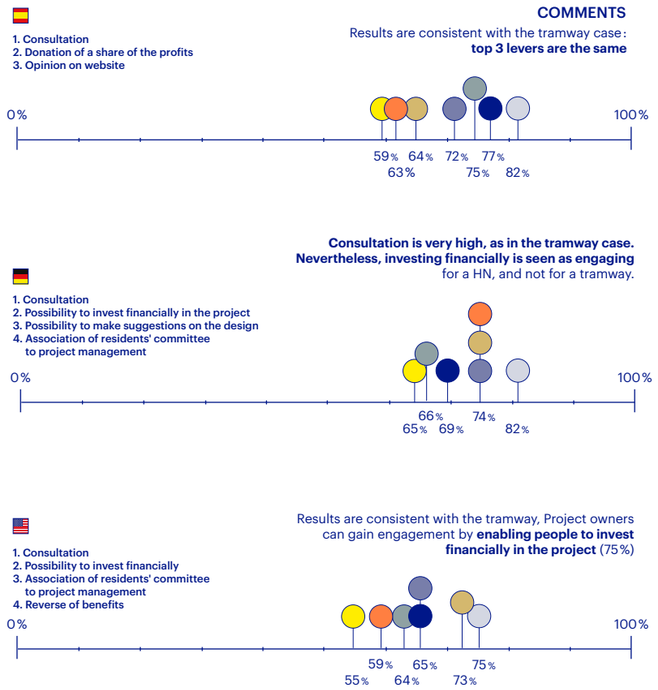


Heating network case

*Answers **"Yes, absolutely"** and **"Yes, fairly"** to 7 options proposed for the question "As a resident of the street directly impacted by the disturbances of a heating network building (worksite, difficulty to park on your street, noise, etc.), would you be more supportive of the project if...?"*

TOP-3 ENGAGEMENT MEASURES PER COUNTRY

COMMENTS



*Answers **"Yes, absolutely"** and **"Yes, fairly"**: if all the previous elements were put in place (consultation, opportunity to make suggestions, to give your opinion on a dedicated website, a local residents' association was closely involved in the management of the project to be involved in a monitoring committee for the realization and operation of the project, to participate in financing, donation of a share of the profits to associations), would you be more supportive of the project?*

- Putting several measures in place to build SLO significantly increases support for infrastructure projects. The trend is stronger regarding a heating network project vs. for a tramway project:

Tramway case

Heating network case

- You had been consulted beforehand on whether or not to accept the project
- A local residents' association was closely involved in the management of the project
- The project holder undertook to donate a share of the profits from the project to local associations
- You were personally involved in a monitoring committee for the realization and operation of the tramway
- You had the opportunity to give your opinion on a dedicated website throughout the project
- You had the opportunity to make suggestions on its design
- You had the opportunity to invest in the project yourself for a modest amount in return for certain benefits

INFORM STAKEHOLDERS EVERY STEP OF THE WAY

The best-in-class stakeholder management processes put information at the heart of every engagement roadmap. **Transparency and accuracy are critical** as they enable project holders to gain trust and legitimacy for longer-term engagement by allowing anyone to **scrutinize the effectiveness, efficiency, and sustainability** of a project.

Informing stakeholders of the benefits, costs, and future impact of a project should be a regular effort and not a one-off activity as putting emphasis on benefits has a very strong impact on bringing support to the project.

SURVEY

Inform stakeholders: easy and effective

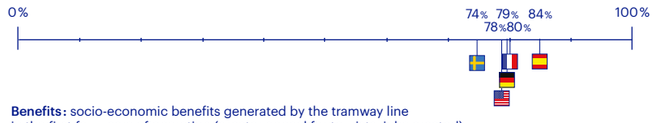
Source: IFOP, with Altermind

- Putting emphasis on benefits has a very strong impact on bringing support to the project.

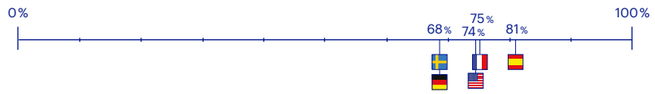
*Answers **"Yes, absolutely"** and **"Yes, fairly"**: the project holder presents you a report showing the benefits of the project. For each of the benefits presented below, indicate whether it is likely to make you more supportive of the project.*

Tramway case

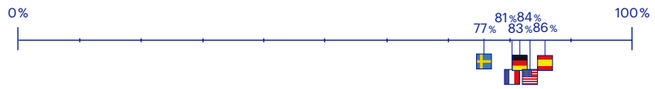
Benefits: positive long-term environmental effects
(air pollution in the city reduced by half after 20 years, better air quality)



Benefits: socio-economic benefits generated by the tramway line
in the first few years of operation (greater appeal for tourists, jobs created)



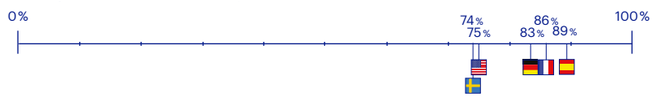
Benefits: improvements to travel once the tramway line is in service
(time saving, reduced traffic congestion)



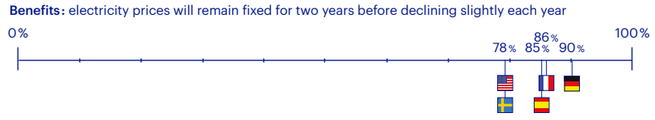
Heating network case

Benefits: long-term positive environmental benefits (the city's carbon footprint is expected to be significantly reduced after 20 years as biomass replaces gas)

Benefits: socio-economic benefits generated by the implementation of the heating network (creation of local jobs that cannot be relocated)



Benefits: electricity prices will remain fixed for two years before declining slightly each year



CASE STUDY 5

TotalEnergie's BioBéarn station: a case for communication with stakeholders

The Biobéarn project was acquired by TotalEnergies in 2021 and aims to produce 11 million cubic meters of biogas, of which 6.5 million can be used as methane injected into the gas network (corresponding to over 69,000 MWh per year). The project has many positive impacts on the region as it avoids 13,150 tons of CO_2 into the atmosphere every year. In response to some discontent from local stakeholders, TotalEnergies made great efforts to communicate about these benefits in order to gain the approval of the communities.

"With the "BioBéarn" biogas station, we transform agricultural and food industry waste into biogas to provide a large quantity of renewable energy to the Lacq region. However, the project was met with discontent from many local residents who called out the negative externalities of the project (i.e. noise, road traffic, odors). We had to "de-dramatize" the project; for example, we organized visits to the methanization units and explained their operation so that the participants perfectly understood that there were no environmental impacts, and as a result tensions disappeared. There is a real educational effort required to realize because we wish to develop our projects around acceptability."

Olivier Guerrini,
VP Biogas Business Unit
at TotalEnergies

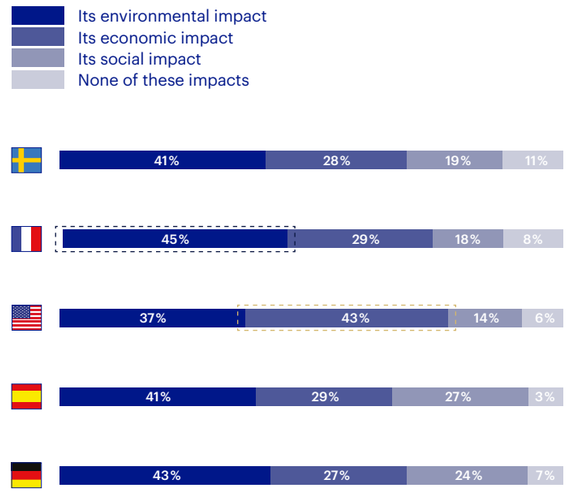
EXPERT POSITION 6

Inform and educate

"The construction of heating networks using biomass was an opportunity for ENGIE to inform project stakeholders about the use of this renewable energy and the benefits it generates. We are also making sure people understand the ins and outs of each project. We have an interest to share, explain, and discuss impact assessments with stakeholders and use a lot of pedagogy."

Cécile Prévieu, EVP in charge of Energy Solutions at Engie

Answers to the question: which element would you pay most attention to in an infrastructure project (e.g. highway, tramway line, solar power plant, hospital, telecom network, waste treatment center, etc.)?



In all countries except the United States, the environmental impact of an infrastructure project is judged to be the most important, followed by the economic impact and the social impact.

The responses are very homogeneous between European countries, but we note a relatively stronger interest in the social impact in Germany and Spain.

DESIGN ANTICIPATION PLANS

As a positive SLO is very fragile by design, maintaining a positive SLO should be construed as "a strategy for controlling costs"[22]. To avoid unexpected withdrawals of their social license at any stage of an asset lifecycle, infrastructure managers can build consistent anticipation plans detailing proactive initiatives and reactive actions to be conducted against potential attacks at their legitimacy (Figure 13).

It involves:

- **Being mindful of SLO risk accelerators:** from a project managing company perspective, there are several characteristics favoring the occurrence of damaging events, including aspects unrelated to the project (size of the company, public exposure, even actions to engage stakeholders);

- **Minimizing the probability of occurrence of SLO risks:** definition of internal norms, regular liaison with stakeholder policy (appointment of corporate ambassadors, preparation of facts-based repository, involvement of the management level), etc.;

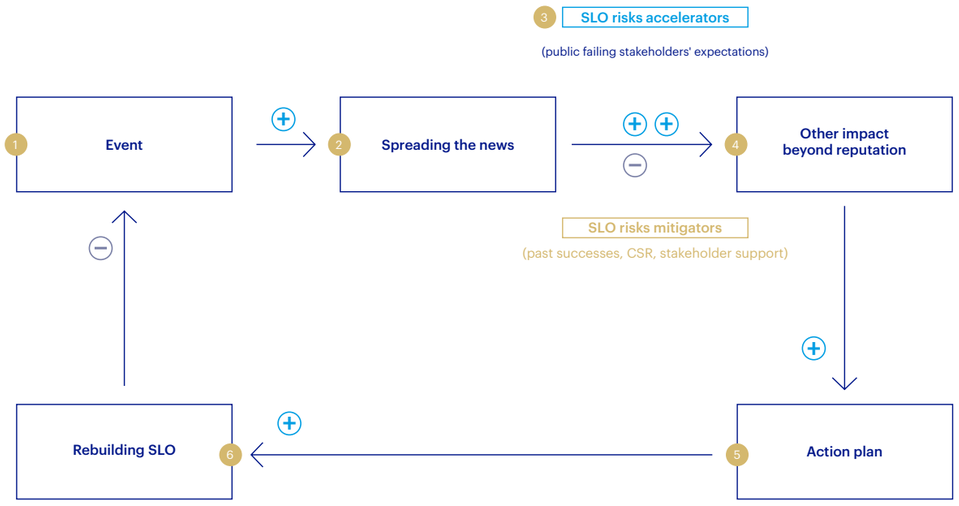
- **Transforming risks of losing SLO into opportunities to strengthen it:** for instance, the role of local stakeholders in infrastructure projects has recently been facilitated by social media and communications, allowing every project holder and interest groups to have a far greater reach but exposing them to waves of "bad buzzes". As a result, social media must now be a core component of every public engagement and stakeholder relations strategy, and it can also be a useful tool for infrastructure owners to monitor operational issues (problems, delays, or other sources of stakeholder dissatisfaction) and therefore enable a quick response.

[22]Robert Boutilier, *"Impact assessment and project appraisal"*, 2014.

FIGURE 13 :

Managing SLO attacks

Source: Altermind, R. Durand



EXPERT POSITION 7

SLO risk accelerators

"In general, managers see size, communication, and reputation as advantages. They tend to overlook that in infrastructure projects, the bigger you are, the more communication you do, and the more established your reputation is, the greater the risk is that opposition or a bone of contention will spiral out of control. Size, image, and reputation oblige you to engage in SLO."

Rodolphe Durand,
Professor at HEC Paris

SURVEY

Anticipating the risks

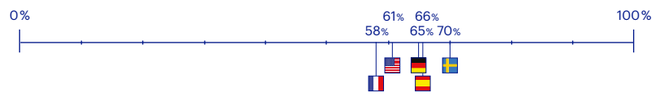
Source: IFOP, with Altermind

The occurrence of hazards – whether in the construction or operation phase – is likely to generate questions from the public. It is mainly the hazards during the construction phase that have a negative impact. **In Sweden and Spain, the trend is very strong.**

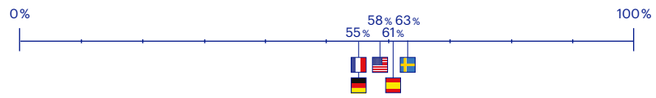
Tramway case

*Answers **"Yes, absolutely"** and **"Yes, fairly"***

"Would a delay estimated to be at least one year (on a 3-year time frame) in the tramway construction reduce your support?"



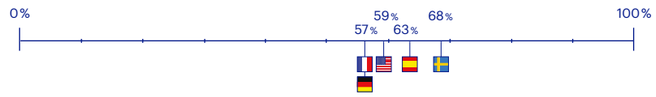
"Would technical faults in the first few months after the tramway was put into service reduce your support?"



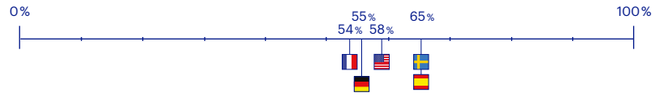
Heating network case

*Answers **"Yes, absolutely"** and **"Yes, fairly"***

"Would a delay estimated to be at least one year (on a 3-year time frame) in the heating network reduce your support?"



"Would technical faults in the first few months after the heating network was put into service reduce your support?"



CASE STUDY 6

Red Eléctrica de España (REE): an innovative "Stakeholder Management Model"

"As both a global and local actor in Spain, REE is faced with social issues daily that encourage the firm to have a positive impact by making its infrastructures more inclusive and contributing to the common good. As a result, *"REE devotes a specific budget to the management of social issues in each project: 2-3% of the project's budget is reserved for increasing local presence through social measures"* Roberto Garcia, CEO of REE.

A standardized model to identify and manage stakeholders

Red Eléctrica has developed its own "Stakeholder Management Model", a standardized method to identify and normalize its relationships with stakeholders. This model encompasses multiple phases:
-Identify stakeholders by analyzing interrelationships between the activities of the company and the socio-economic environment;
-Prioritize stakeholders according to their influence on the achievement of the firm's objectives and to the firm's influence on the stakeholders;
-Design a relationship framework to categorize the type of relationship with each stakeholder group.
The model is constantly redefined, challenged, and improved as feedback is received on the effects and levels of satisfaction observed in the field.

Relying on cutting-edge technologies to maximize social impact

The standardization of the stakeholder management model helps Red Eléctrica to reduce territorial inequalities. In addition, REE leverages cutting-edge technologies: for instance, in collaboration with the Spanish telecommunications operator Hispasat and Elewit, Red Eléctrica created innovative satellite connectivity bubbles. These bubbles embody a technology-driven way to enhance social engagement as they contribute to bridging the digital divide in Spain by ensuring connectivity in every region.

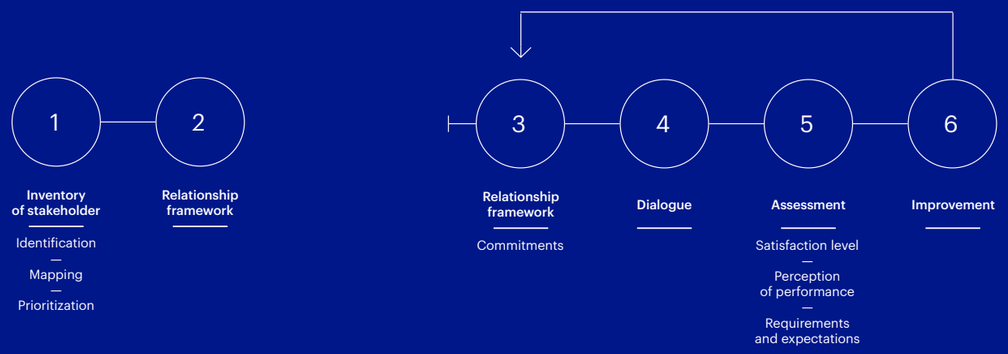
By placing the bubbles on high-voltage towers, REE helps extend cellular and broadband coverage in rural and remote environments. This technology ensures access to a wide variety of solutions in isolated areas (e.g. high-speed broadband and the digitalization of universal rights including education and healthcare) and facilitates the development of sectors such as agri-food and forestry.

"I see the telecom sector as an enormous tool to facilitate contact with local players and as a means to provide basic services without leaving anyone behind."
Roberto Garcia, CEO of REE

FIGURE 14:

REE's stakeholder management model

Source: Altermind, R. Durand



USE CUTTING-EDGE TECHNOLOGIES TO BUILD INCLUSIVE INFRASTRUCTURE

Digital technologies can be used to build more inclusive infrastructure by maximizing the benefits of infrastructure assets through the provision of new services.

From a project management perspective, **industry 4.0 technologies can also help define and monitor the parameters for project management** and strengthen projects by ensuring collaboration between grantors and contractors at the early stages of a project. As an example, the use of a digital twin of the infrastructure (i.e. a digital model of a real-life infrastructure) can be used to inform stakeholders of the design and delivery process, and collects their feedback as they interact with the virtual model.

Some urban planning projects in the Netherlands have shown virtual reality (VR) can favor a better understanding of projects from all stakeholders interviewed (residents, contracting public authority), leading to fewer objections and more substantive discussions due to enhanced access to high-quality information and ability to influence the design of the asset[23].

In a more prospective way, **the advent of a new wave of technologies and computing provides new options to improve the time efficiency and effective inclusivity of stakeholder engagement processes** in the planning and design stages of infrastructure assets. Although still at an early stage, the metaverse technology seems promising, in order to create connected and collaborative environments for carrying out various experiments, collaborative meetings, and presentations to clients.

[23]RA. Cranmer & al., *"Worth a thousand words: Presenting wind turbines in virtual reality reveals new opportunities for social acceptance and visualization research"*, Energy research & Social Science (volume 67), September 2020.

EXPERT POSITION 8

Finding the right balance between digital and physical tools

"There are three types of digital tools to leverage in infrastructure management to involve a maximum of stakeholders:

- Reactive tools, which have been used by SNCF to set up social media crises rooms (10-20 full-time employees) in order to inform the public and try to avoid unmanageable movements on social media;

- Public inquiries, which now involve interactive internet websites, allowing users to comment and react;

- Digital marketing, which are used to understand the use of transportation infrastructure, subject to privacy rules."

Patrick Jeantet,
Senior Advisor
at Vauban IP

Still, "you do not manage a crowd just with data and AI, especially as there is a whole population out of the digitalized world which may not be reached. As a result, a balance needs to be found between using data and organizing local grassroot processes, in order to cover all local aspects and find the relevant perimeter to act."

Pierre Hausswalt,
Head of Strategy
and Transformation
at SNCF

FROM SOCIAL LICENSE TO OPERATE TO SOCIAL LICENSE TO INVEST: THE RESPONSIBILITY OF INFRASTRUCTURE INVESTORS AND BANKS

Key takeaways

→ The financing of infrastructure assets can be leveraged to create a social license to invest (SLI): three pillars must be combined to make it happen.

→ To strengthen SLI, the regulatory framework has a critical role to play by increasing transparency across all actors.

→ The effective EU green taxonomy, and the expected social taxonomy, could be key catalysts of this transition.

Sustainable finance: securing SLI, strengthening SLO

1st pillar: long-term concerns

Compared to short-term investments relying on capital gains and market conditions on exit, long term is especially valuable in core infrastructure investing[24]:

- **Infrastructure investors rely on long-term resources and consider the long-term risk factors:** institutional investors such as pension funds and insurance companies invest in infrastructure (directly or indirectly) to mitigate the portfolio's risk profile, providing multiple benefits. Investors and asset managers involved in infrastructure investment also consider the long-term risk factors, given (i) the long infrastructure lifecycle and (ii) the need for stable returns over time and the preservation of value;
- **Long-term investment is especially valuable in infrastructure as it makes it possible to align the interests of all stakeholders** – shareholders, users, off-takers, regulators – and to build strong and lasting partnerships, leads to work on value creation more broadly and allows ESG criteria to be incorporated into investment analysis and asset management, and makes it possible to invest in the development of new infrastructures that are becoming essential (digital, EV charging);

2nd pillar: responsible criteria

- Responsible investing is no longer a niche[25]. As a strategy and practice that incorporate ESG factors in investment decisions and active ownership, its popularity has grown substantially: for instance, inflows into sustainable funds rose from USD 5 billion in 2018 to more USD 50 billion in 2020 and then to nearly USD 70 billion in 2021[26]. **The increasing focus on ESG favors the delivery of essential services to communities in a sustainable way,** making it a key lever to gain and maintain the investment community's social license. As a result, to strengthen their SLI, **fund managers and banks are today expected to follow robust and pragmatic procedures throughout the investment cycle** to identify and analyze ESG factors, determine their relevance to each deal and ensure they are properly addressed[27]:
- Informing investment decisions by understanding the important ESG factors, potential related liabilities, costs and influence on financial performance, and potential opportunities for value creation;
- Ensuring adequate systems are in place to assess and monitor companies' ESG performance, to comply with the applicable ESG requirements and to manage associated investment risks;
- Forming the basis for ongoing engagement with companies to discuss, assess and manage ESG risks and impacts, and to identify and capitalize on opportunities;

[24] Vauban IP, *"Building infrastructure portfolios for long term,"* November 2019

[25] Two categories of sustainable finance tools have to be distinguished: (i) tools through which investors gain exposure to the variations of activities/assets/enterprises which are sustainable, without effective contributions to sustainable activities and (ii) tools through which capital is effectively brought to the sustainable economy. This section focuses on the latter.

[26] Inflows into sustainable funds, for example, rose from $5 billion in 2018 to more than $50 billion in 2020—and then to nearly $70 billion in 2021; these funds gained $87 billion of net new money in the first quarter of 2022, followed by $33 billion in the second quarter.

[27] British International Investment, ESG Toolkit, Investment cycle: Guidance on integrating ESG considerations into the investment cycle of a private equity fund.

EXPERT POSITION 9

The critical importance of aligning interests

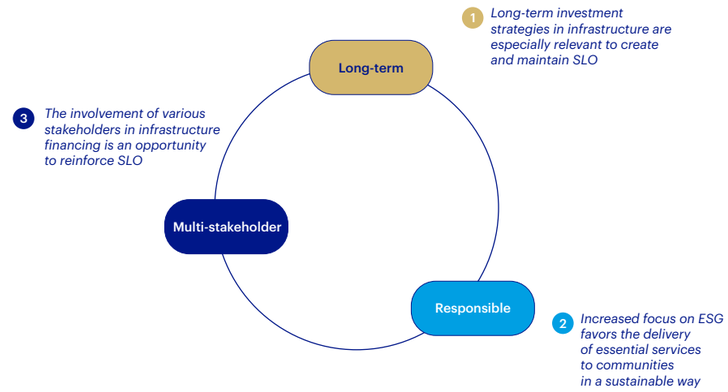
"Aligning interests of investors and investees on the long-term is what society needs, making it possible to reconcile the tragedy of horizons – long-term issues will only be tackled through long-term commitment and investments."

Thierry Philipponnat, Chief Economist at Finance Watch

FIGURE 15:

The three pillars of a social license to invest (SLI)

Source: Altermind



- Demonstrating proper consideration and management of relevant ESG factors to relevant stakeholders, particularly limited partners (LPs).

Investors are increasingly looking to achieve financial returns while performing in terms of extra-financial aspects, using international standards and guidelines such as the United Nations Principles for Responsible Investment (UN PRI or PRI)[28]. Still, in recent years, **the industry has been questioned on green and social washing**, and investors are now demanding more valuable insights into whether companies have moved the needle on ESG principles.

Responsible investment is evolving from a basic assessment of a company's activities (usually focused on managing risks and screening out bad investments) to valuing an investment's actual effects and dependencies in tackling the climate emergency, social inequality, etc. **The focus on ESG criteria leads investors and banks to pay attention to SLO challenges as part of their investment process.**

[28] The Principles for Responsible Investment define responsible investment as "an approach to investing that aims to incorporate ESG factors into investment decisions, to better manage risk and generate sustainable, long-term returns." By embedding ESG considerations into their investment activities, signatories therefore broaden the scope of fiduciary duty as it used to be construed. While at its creation in 2006, 63 investors signed the PRI managing a total of USD 6.5 trillion, by the end of 2021, this had grown to 4,375 investors, representing USD 121 trillion.

3rd pillar: a multi-stakeholder approach

The financing of an infrastructure project involves various stakeholders, which have **their own objectives and constraints but must find an agreement to fund and carry out the project.** The objective is to align the interests of these stakeholders and build on their common interests. For instance, in the negotiation of the project contracts, it is generally considered that public authorities and lenders and financial investors have the same interests, with respect to the robustness of the contractual scheme and the incentives for the good performance of the project.

Private funding by lenders and financial investors is a factor of success of infrastructure projects, because private funders bring their expertise (for the structuring but also for asset management) and it reinforces performance incentives for the SPV.

EXPERT POSITION 10

ESG policies

"For several years, Natixis CIB has incorporated ESG risk management in its financing and investment policies. As part of our ESG approach, we not only respect the "Equator Principles", a framework mainly used in the infrastructure and industrial sectors as a common baseline for financial institutions to identify, assess and manage environmental and social risks when financing projects; but we have also gone further by building our own internal tool – the "Green Weighting Factor" (GWF) – to steer our temperature trajectory. The GWF enables us to allocate capital towards projects and clients depending on their environmental impact while continuing to adapt to the fast evolving regulatory, taxonomy, and technological landscape. We have a dynamic approach to ESG risk management. One critical trend we are currently observing is that the "E" is increasingly impacting the "S", as society focuses on challenges relating to climate change. We believe environmental and social issues are becoming more and more interconnected and both issues must be considered as one."

Anne-Christine Champion, Co-Head of Natixis Corporate & Investment Banking

FIGURE 16 :

Natixis CIB, a pioneer in sustainable financing with the "Green Weighting Factor"

Source: Natixis

- An in-house mechanism that links analytical capital allocation to the degree of sustainability of each financing
- Long term objective: align the climate trajectory of Natixis' balance sheet with Paris Agreement objectives (+1,5°C trajectory)
- The GWF is now fully integrated in our IT systems and internal credit process as a mandatory & systematic step ahead of credit decisions
- Use cases of the GWF have multiplied since its implementation in 2019

"Crédit Agricole-CIB (CA-CIB) has developed a strong ESG policy since the aftermath of the 2008 financial crisis, alongside other French and European banks. For CA-CIB, a good client is both profitable and compliant with our ESG policies and objectives. Indeed, environmental and social aspects are critical investment criteria. On environmental aspects, we are able to have a quantitative approach, in order to evaluate our financing in terms of related carbon emission and align all our sectors on a Net Zero trajectory. As a member of the Net Zero Banking Alliance which Crédit Agricole Group joined in July 2021, CA-CIB has committed to reduce its exposure to upstream production of oil by 20% by 2025 compared to 2020 and to increase its support for non-carbon energies by 60% by 2025. We have toughened our exclusion policy from certain hydrocarbons and we plan to progressively extend this policy to new high carbon footprint sectors. On social and governance aspects, our approach is, by definition, more qualitative although structured and rational as well as supported by external advisors. As part of our requirements, we have our prospects and customers develop and disclose specific KPIs that are later evaluated during our investment committees. Projects leading to negative social impacts or that are not managed properly are simply rejected."

Didier Gaffinel, Deputy General Manager & Head of Global Coverage & Investment Banking at CACIB

"At BBVA, ESG is a critical part of our investment due diligence and decision process. We promote a comprehensive and pragmatic view of ESG. In order to optimize the social impact of projects, our approach is to focus on four areas: health and safety of the employees; transparency, i.e. providing enough information about critical KPIs (water use, waste, carbon emissions, etc.); commitment of developers to manage environmental and social issues according to international standards; and attention paid to managing complex and long value chains. For each project, we identify the key social risks. We also pay much attention to positive social impacts, especially on vulnerable communities, social infrastructure and entrepreneurship."

Ricardo Laiseca, Head of Sustainability Transition at BBVA

"At the European Investment Fund, our sustainable investment approach is organized around two pillars. First, we scrutinize ESG criteria through a rigorous and systematic process, set out in our ESG Handbook. We ensure the project is relevant, identify potential downsides, try to mitigate them and make sure fund managers have the capacity to deal with them and monitor our books. We pay equal attention to all criteria. In particular, social aspects may raise severe issues – such as workers' rights, population displacements, etc. Second, we ensure the transparency of our investments. For instance, we make sure environmental assessments are made public and accessible on the internet or that complaint mechanisms exist. We started to deploy this approach 15 years ago and are constantly improving it, to meet increasing requirements to identify the key social risks. We also pay much attention to positive social impacts, especially on vulnerable communities, social infrastructure and entrepreneurship."

Barbara Boos, Head of Climate and Infrastructure Fund Investment at the European Investment Fund

FOCUS 4

The tokenization of infrastructures

The tokenization of infrastructure refers to the process of transferring the information and associated values of infrastructure assets onto tokens which can be exchanged on a blockchain. It could help bridge the "infrastructure gap" while also strengthening the SLO.

There are different types of tokens: (i) payment tokens or currency tokens, including crypto-currencies like bitcoin, (ii) utility tokens: rights of access to goods and/or services offered by the issuer, (iii) security tokens: financial instruments (such as shares, or bonds) and (iv) non-fungible tokens (NFTs) – tokens of ownership of unique assets, non-interchangeable with each other.

Although the tokenization of infrastructure is still in its infancy and faces significant obstacles, the development of Web3 could open up new perspectives and create substantial benefits:

- Financial benefits: companies can broaden their investor base (including individuals) and benefit from lower trading costs (automation, peer-to-peer);

- Increased transparency: once the set of conditions previously defined with stakeholders is met, the automatic and instantaneous execution of the terms of smart contracts without human intervention ensure accountability from the infrastructure promoters, builders and operators (e.g.: payments according to KPIs, monitoring of environmental and social impacts, etc.);

- Shared ownership: the distribution of a small share of the tokenized infrastructure to the community (municipalities, individual users etc.) allows its members to hold credits to be used for future services or to have voting rights or to receive a return on investment according to the project performance.

Examples

- A few blockchain-based platforms for green energy projects fundraising have emerged in the last few years such as Sun Exchange ($8.3million raised since 2016) or WePower ($43 million raised in 2017 -2018).

- In Bahrein, the digital asset-specialized company Fasset tokenized a first electric vehicle charging unit in May 2021: 10 tokens granted to electric vehicle users provide them with access to the wall charger at discounted rates.

- In May 2022, ENGIE Energy Access and the Energy Web Foundation have announced their intention to use cryptocurrencies and blockchain technology to accelerate access to electricity in sub-Saharan Africa.

The critical role of regulations to build an SLI

The challenge of investing in inclusive infrastructure

ACCELERATING THE "S" IN ESG INVESTMENT

The unprecedented Covid-19 outbreak and current geopolitical tensions have come with very severe social and economic consequences, putting **inclusion at the forefront of political agendas.** Funds no longer see ESG only through the lens of climate change and decarbonization, as a broad range of social and governance aspects are drawing attention.

Facing the current crisis, applying a social value lens for infrastructure investing **can help further constructive relationships** between investors, operators, employees, public authorities and civil societies to deal with inequalities and exclusion. Regeneration investments in socially inclusive infrastructure projects represent a **once-in-a-lifetime opportunity** to deliver social value by enhancing employment and skills for disadvantaged or excluded members of society.

A GROWING ATTENTION ON SLO

To build a long-lasting SLI, **investors are trying to integrate SLO into their investment decisions**. Diversity, equity and inclusion (DEI) has notably become increasingly important to those investing in infrastructure and funds and banks are now expected to answer the rising call from certain groups and backgrounds that experience systemic barriers to accessing education or the job market. Investors today have a very important role in advancing DEI efforts to respect parity and achieve good representation of a social diversity.

EXPERT POSITION 11

The emergence of impact-based approaches

"Société Générale has been an initiator of the Positive Impact Initiative launched by the United Nations Environment Programme Finance Initiative (UNEP-FI) Banking Commission in 2015. The bank quickly understood that the finance sector can play a central role in facilitating the transition to an impactful and impact-based economy. We have developed a very rigorous and detailed methodology to assess projects falling into the positive impact finance category. As a pioneer, we have also developed two levers to incentivize and reward positive impact within Global Banking and Advisory. First, the positive impact finance projects benefit from subsidized internal funding. Second, we accept a lower level of profitability for these projects. This approach has allowed us to fund numerous projects in various areas, such as building renovation, energy performance, fiber networks, EV charging, green hydrogen, carbon capture, etc. The 'positive impact' is appreciated in all the complexity of the projects we examine."

Pierre Palmieri, Head of Global Banking and Advisory & Head of Sustainable and Positive Impact Finance at Société Générale

EXPERT POSITION 12

SLO as an investment criterion

"We can expect SLO to become a wider-used criterion within responsible investing. At a moment marked by multiple, interrelated crises (the Covid-19 pandemic, environmental challenges, and deepening social inequalities), investors' work with environmental, social and governance issues must grow to become even more sophisticated and inclusive."

Simon Whistler,
Head of Real Assets at PRI

"SLO – or stakeholder management – is a critical concern which requires a well-advanced approach to ESG investment. An ESG review is the first step of our investment process. During this review, we seek to ensure that managers are paying attention to stakeholder engagement. Losing the SLO is one form of a stranded asset risk; it could make the asset unusable. We have in the past rejected investment opportunities due to heightened SLO risks. Examples include infrastructure assets which only benefited a small and privileged minority, or projects with poor working conditions. We ask ourselves how disruptive or additive the assets we finance are to local communities and whether those issues are being properly dealt with through stakeholder engagement."

Dr. Thilo Tecklenburg,
Co-Head Infrastructure, and
Christian Schuetz,
ESG Director at Golding

"At Société Générale, SLO is part of our ESG due diligence process to make sure the projects we are involved in (as a funder or an advisor) comply with international standards (such as the Equator Principles) as well as our internal guidelines. We examine whether projects display a broad social acceptance (from local stakeholders, employees or society in general) and how SLO is handled in the implementation of the project. Our governance has been designed to address this issue properly; for the most sensitive or debatable cases, SLO is discussed collectively amongst investment teams, country teams, CSR managers, communication managers, etc.."

Pierre Palmieri,
Head of Global Banking and Advisory & Head of Sustainable and Positive Impact Finance at Société Générale

"BlackRock thinks of SLO with a 'transitional lens'. And this is a global challenge, not only a developed markets issue – no one can be left behind. So while most investments are focused on OECD, emerging markets are home to the largest part of the world's population and with energy demand expected to double this is where most impact and CO_2 emissions reduction could actually be delivered. And SLO is a critical ingredient of success."

Estelle Castres,
Chief Executive of BlackRock France Belgium Luxemburg

The need for a clearer regulatory framework

THE CRITICAL ROLE OF REGULATIONS

To accelerate the transition towards sustainable investment and hence help investors strengthen their SLI, the regulatory framework has a critical role to play by increasing transparency across all players. According to PRI[29], sustainable investment policy and regulation need to cover five areas:

- Corporate ESG disclosures (e.g. Non-Financial Reporting Directive (NFDR) in the EU);

- Financial stewardship, which means protecting the long-term assets of an organization through a commitment to moral,ethical, and prudent financial decision-making;

- Investors' duties to incorporate ESG-related considerations, to provide sustainability-related disclosures, and to report on their ESG incorporation policies and performance targets (e.g. Sustainable Finance Disclosure Regulation (SFDR) in the EU);

- Taxonomies of sustainable economic activities (e.g. Green and Social Taxonomies in the EU);

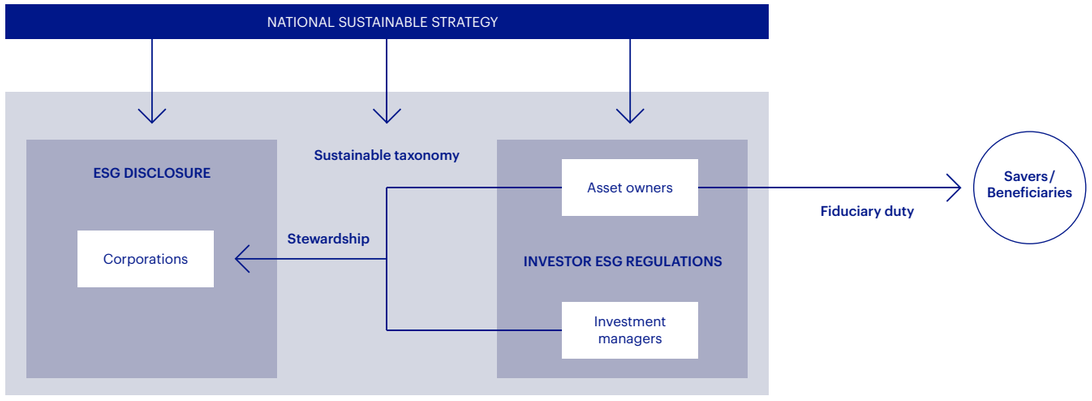
- National/regional sustainable finance strategies.

[29] PRI, *"How policymakers can implement reforms for a sustainable financial system"*, 2020.

FIGURE 17:

Scope of the national sustainable strategy

Source: PRI, 2020



GREEN TAXONOMY, SOCIAL TAXONOMY

In July 2020, in order to meet the EU's climate and energy targets for 2030 and reach the objectives of the European green deal, the EU created a "green taxonomy". This tool reflects a **common European classification system** for environmentally sustainable activities and aims at guiding companies and investors towards sustainability. To do this, the green taxonomy framework includes six objectives and considers economic activity to be sustainable if the activity contributes to at least one of these objectives without, at the same time, doing significant harm to any of the other objectives.

Reflecting the green taxonomy, in February 2022 the Platform on Sustainable Finance proposed a structure for a **"social taxonomy"** within the present EU legislative environment on sustainable finance and sustainable governance. **The suggested structure consists of three objectives,** each of which addresses a different group of stakeholders: decent work (including for value-chain workers), adequate living standards and wellbeing for end-users, and inclusive & sustainable communities and societies.

FIGURE 18:

The EU green taxonomy framework

Source: European Commission

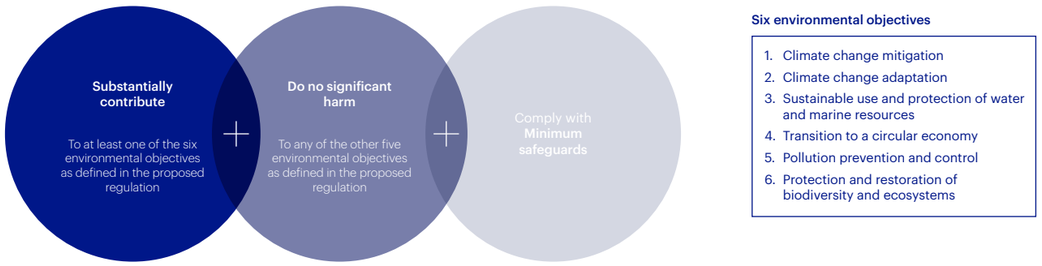
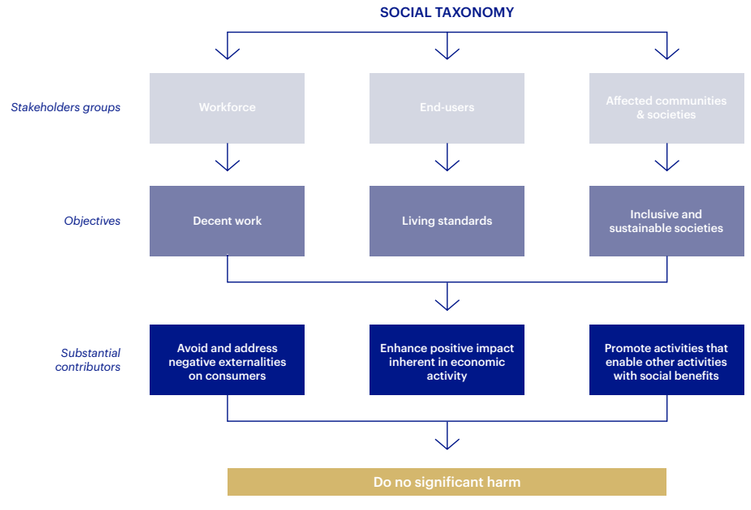


FIGURE 19:

A social taxonomy framework

Source: European Commission



FOCUS 5

Social taxonomy: a promising tool but still a long way to go

The intended purpose of a social taxonomy – just like its environmental counterpart – is to establish an understandable and shared way of defining what a socially sustainable activity or company is. It could answer expectations from financial players. According to a survey, 46% of institutional investors find that the 'S' of ESG is the hardest to define and integrate into portfolio allocation decisions (2019 ESG Survey, BNP Paribas).

"Similarly to how NN Group currently uses the principles of the green taxonomy to set targets on green investments, a social taxonomy would be a very useful tool to assess the proportion of their portfolio to be directed towards social investments."
Erik Joustra, Investment Officer at NN Group.

"A social taxonomy would provide investors with a clear picture of what is sustainable and not only 'green', as green objectives cannot be achieved at all costs."
Gwen Colin, ESG Director of Vauban IP.

At this stage, the 'Social Taxonomy' remains only a report, with an uncertain horizon and implementation issues; the legislative process has not started yet, as the consultation is a way for the Commission to assess whether and how to extend the Green Taxonomy to social matters.

"Two significant differences with the environmental taxonomy raise the issue of designing an operational framework. First, a social taxonomy cannot be science-based, the 'solution' adopted being to rely on internationally accepted treaties (wide acceptance of UN guideline principles, OECD conventions etc.). Second, applying the CAPEX/turnover assessment logic is impossible for several social aspects."
Thierry Philipponnat, Chief Economist at Finance Watch.

However, even without formal social taxonomy, financial players can take the initiative of paying more attention to the social aspects of their investments.

"BNP Paribas has taken initiatives around the concept of the 'just transition': as environmental investments are easier to measure and more profitable to invest in, the concept allows reflection on how to reconcile both the E and the S of ESG."
Maha Keramane, Head of Positive Impact Business Accelerator of BNP Paribas.

SOCIAL LICENSE, A VALUE-CREATION DRIVER

Key takeaways

→ The relationship between value creation and social licensing goes two ways: (i) gaining stakeholder engagement is key to ensuring a project proceeds on-schedule and-budget, generates revenues, and enhances profitability and the financial valuation of a firm; and (ii) creating shared value for all stakeholders can also secure a social license for the long-term.

→ To make the best of SLO/SLI's value potential, contractual arrangements must now integrate a stakeholder-centric and more flexible dimension. In infrastructure sectors, public-private partnerships (PPPs) traditionally govern the relationship between the public entity and the private partner; they now tend to fit more and more into a broader perspective, include sustainability goals and more stakeholders.

Value creation and social license: a two-way street

Secure SLO to create economic and financial value

SLO, A BUSINESS OPPORTUNITY

Obtaining and maintaining SLO is key to ensuring an infrastructure project proceeds on-schedule and-budget and generates revenues during the operation phase. Companies managing operations with significant environmental and social impact should look for the consent of non-market stakeholders (local communities, NGOs, etc.) to avoid repeated episodes of stakeholder conflict negatively impacting their activities.

Moreover, when building a SLO, a company integrates a social dimension into its value proposition, secures more robust partnerships with its stakeholders, and takes long-term considerations into account, which can result in a competitive advantage:

- Building a social license opens new markets and new value chain configurations: it enables firms to find ways of doing business that competitors may have overlooked and boost innovations taking sustainability and stakeholders into account. This practice may not only open new areas of business for a company, but also limit its costs and strengthen its resilience to external shocks;

- Like CSR activities, SLO can be considered to have an "insurance-like" role. Academic research has shown that when negative events occur, the decline in shareholder value is smaller for firms that engage in CSR activities than for firms that do not[30]. Also, CSR creates value for shareholders by reducing risk and lowering stock price volatility[31];

- SLO can help companies strengthen their brand: they can hire better employees (selection effect) **or improve working relationships with current employees** (productivity effect), making current and future projects more efficient and more inclusive.

As an illustration, a McKinsey Global Institute study looked at 615 large- and mid-cap US publicly-listed companies from 2001-15 and concluded that those with a long-term view – a crucial aspect of SLO – outperformed the rest in earnings, revenue, investment, and job growth[32]. Other research found that companies with strong ESG norms recorded higher performance and credit ratings and perform better during crises[33].

With this in mind, treating societal challenges as business opportunities should therefore become a new dimension of corporate strategies and stakeholder engagement should be embedded within internal best practices[34].

SLO, A BOOST FOR ENTERPRISE VALUE

Social license has also become an important factor in the preservation of enterprise value. Higher profits can be a by-product of value created for a society: companies focusing on stakeholder welfare as an end goal increase their total value ("grow the pie") more than those solely focused on financial results [35].

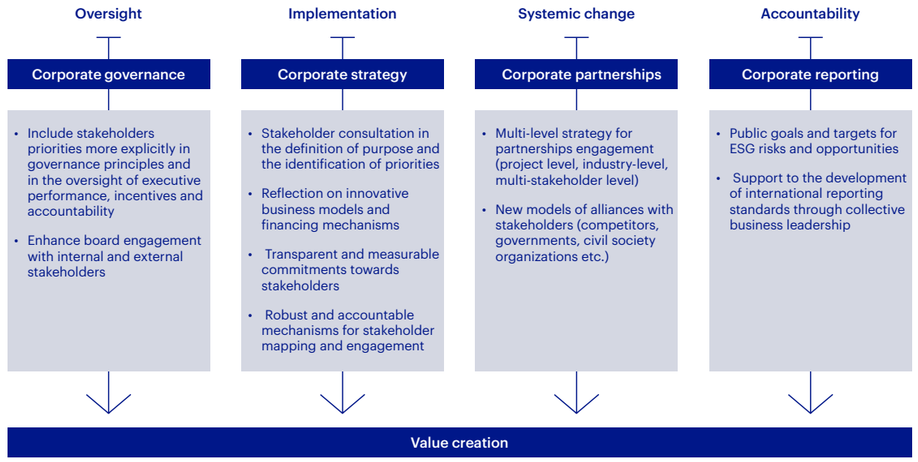
Academic research has shown evidence of a positive relationship between stakeholder engagement processes and the financial valuation of a firm, holding constant the objective valuation of the physical assets under its control. Business leaders must therefore proactively apply this wider appreciation of the drivers of enterprise value into strategies that simultaneously benefit shareholders and other stakeholders, and recognize such synergy can be a win-win.

[30] P. C. Godfrey, C. B., Merrill, & J. M. Hansen, *"The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis,"* Strategic Management Journal, 30(4), 2009, 425-445.
[31] S. Kim, G. Lee & H. G. Kang, *"Risk management and corporate social responsibility,"* Strategic Management Journal, 42(1), 2021, 202-230.
[32] McKinsey Global Institute, *"The case for stakeholder capitalism"*, 2020.
[33] Mary Johnstone-Louis et al., *"Business in times of crisis"*, Oxford Review of Economic Policy, 2020, Volume 36, Number S1, pp242-55.
[34] Michael E. Porter and Mark R. Kramer, *"Creating Shared Value, How to reinvent capitalism and unleash a wave of innovation and growth"*, Harvard Business Review, 2011.
[35] Edmans, Alex: *"Grow the Pie: How Great Companies Deliver Both Purpose and Profit,"* Cambridge University Press, 2020.

FIGURE 20 :

Internalization of stakeholder engagement within corporate practices

Source: Altermind, inspired from R. Samans & J. Nelson, 2022



FOCUS 6

Generating financial value through stakeholder engagement [36]

An academic study provides direct empirical evidence in support of the instrumental stakeholder theory's argument that increasing stakeholder support enhances the financial valuation of a firm.

The authors undertook this analysis using panel data on 26 gold mines owned by 19 publicly-traded firms over the period 1993–2008. They recorded over 50,000 stakeholder events from media reports to develop an index of the degree of stakeholder conflict/ cooperation for these mines.

The incorporation of the index of stakeholder cooperation in a market capitalization analysis significantly reduces the discount placed by financial markets on the net present value of the gold controlled by the firms studied. Among the key findings of the study, investors recognize on average:

- $0.28 of every $1 of gold in the ground (Net Present Value);

- $0.46 of every $1 of gold in the ground, when country-level political risk is accounted for;

- $0.87 of every $1 of gold in the ground, when project-specific stakeholder relations are also accounted for.

According to Yani Roditis, COO Gabriel Resources, *"It used to be the case that the value of a gold mine was based on three variables: the amount of gold in the ground, the cost of extraction, and the world price of gold. Today, I can show you two mines identical to these three variables that differ in their valuation by an order of magnitude. Why? Because one has local support, and the other doesn't."* Academic research confirms this stance.

[36] W. Henisz, S. Dorobantu & L. Nartey, *"Spinning Gold: The Financial Returns to External Stakeholder Engagement"*, Strategic Management Journal, 35(12), 2011.

Create shared value to build a SLO

"SHARED VALUE", THE NEW BEST-IN-CLASS

To date, business strategies have mostly been built through the prism of economic and financial value, from value proposition to value capture, value creation, and delivery. Yet, in recent years, the concept of **"shared value" – i.e. pursuing financial success in a way that also yields societal benefits** – has become more and more important for corporates.

The concept was initially developed by Michael E. Porter and Mark R. Kramer in 2011 [37], who stated that companies can drive innovation, global growth, and also create benefits for society. As a result, managers and investors who used to focus on short-term performance metrics are now expected to **consider the creation of value over the long term that can benefit all stakeholders.**

Two reasons can explain this shift towards shared value[38]:

- The legitimacy of business has been sharply called into question, with companies seen as prospering at the expense of the broader community;

- At the same time, many of the world's problems, from income inequality to climate change, have shaken public trust in large corporations but require the emergence of scalable and sustainable business models from the private sector more than ever.

In this context, today's value-minded executives try to create and maximize a project's value to all stakeholders, making "shared value" a strong catalyst of SLO, now and in the future. To do this, multisector coalitions must be built to align interests between governments, NGOs, companies, and community members[39].

[37] Michael E. Porter and Mark R. Kramer, *"Creating Shared Value, How to reinvent capitalism and unleash a wave of innovation and growth"*, Harvard Business Review , 2011.
[38] M. R. Kramer, M.W. Pfitzer, *"The Ecosystem of Shared Value"*, Harvard Business Review, October 2016.
[39] Five elements must be in place for a collective-impact effort to achieve its aims: (1) a common agenda, which helps align the players' efforts and defines their commitment; (2) a shared measurement system; (3) mutually reinforcing activities; (4) constant communication, which builds trust and ensures mutual objectives; and (5) dedicated "backbone" support, delivered by a separate, independently funded staff, which builds public will, advances policy, and mobilizes resources.

FIGURE 21:

Different types of value for different types of stakeholders

Source: Altermind

Value to customers	• Increase customer value through new services • Offer safe, reliable, eco-friendly services
Value to business partners	• Build partnerships based on mutual trust and fair trade • Promote socially responsible activities across the value chain
Value to shareholders	• Increase corporate value by achieving sustained business growth • Provide timely and appropriate information disclosure and communication
Value to employees	• Provide workplaces that motivate diverse employees • Maintain a culture that fosters personal development and fair treatment
Value to communities	• Contribute to solving social issues through social contribution • Respect the cultures and customs in communities a firm operates and contribute to its development
Value to society	• Conduct business activities in an eco and socio friendly manner • Contribute to the reduction of environmental impact and maintenance Earth's self-recovery capabilities

EXPERT POSITION 13

Sharing value: a snowball effect

"At Equans, we aim to meet the challenges of energy, industrial, and digital transitions by connecting and protecting a large range of stakeholders, including industries, startups, communities, and infrastructures. We strongly believe our employees – notably technicians – are the key to empowering these transitions and making them real. We are committed to sharing value with all of our employees, which fosters a snowball effect, acting as a catalyst for increased motivation and higher-quality services for our customers.
The company management is based on the inverted pyramid, each manager shall be a 'servant leader', helping their team to succeed. This is how we manage to maximize shared value."

Jérôme Stubler,
CEO of Equans

CASE STUDY 7

DCO Energy: a long-lasting commitment to create social value

Committed to enriching the economic stability of communities among which the firm operates, DCO Energy designed an outreach program called “Competitive Edge” deployed in projects carried out by the firm.

In collaborations with its local contractors and community partners, DCO Energy identifies and recruits young local apprentices (between 18 and 30 years old) from disadvantaged local communities, with the aim of developing marketable skills and careers. DCO Energy also leverages this program to engage with and support local woman-owned and minority-owned businesses.

Competitive Edge is made of many subprograms helping excluded young people to enter professional careers thanks to a first strong experience. Students have the opportunity to receive practical applications training, but also instruction on STEM (Science, Technology, Engineering & Mathematics), career building, safety rules, etc.

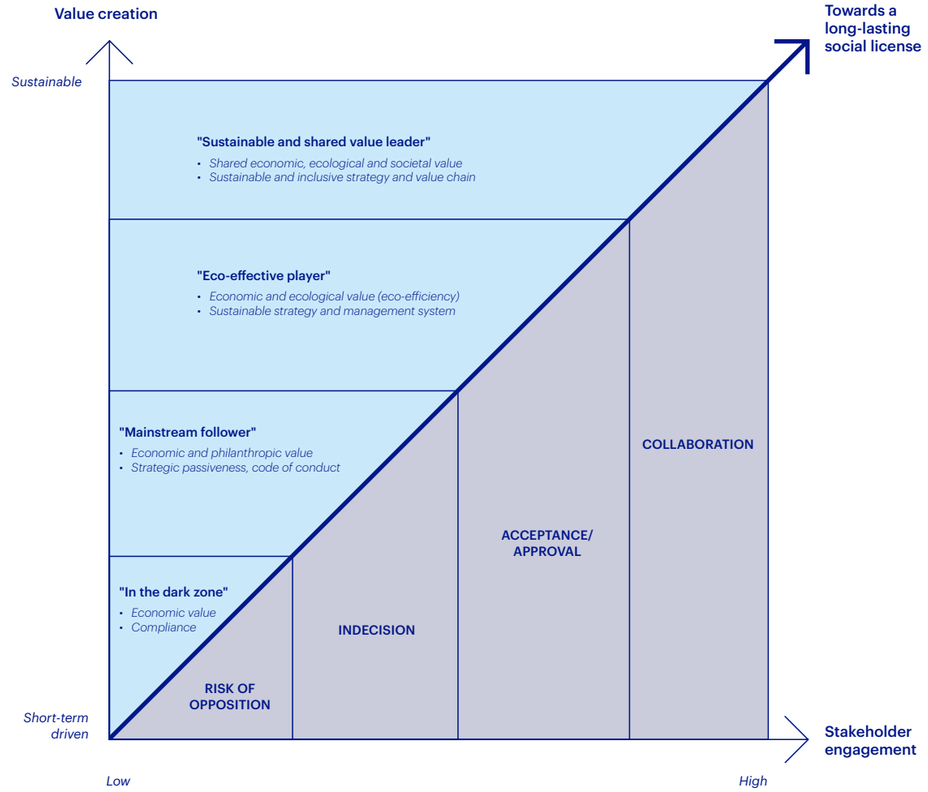
As an illustration, DCO Energy and its affiliate companies have partnered with the New Jersey Judiciary’s Opportunities for Building Success program and the New Jersey Office of Probation Services to help match justice-involved individuals with construction career opportunities, which the firm believes to be compatible with their skill level and their motivation to succeed. The program tries to find an appropriate and humanist solution to this social issue and participates to make the life of such communities better.

“Commitment to long-term partnership with local stakeholders is part of DCO Energy’s DNA. Our founders understood that the direct involvement of all stakeholders – including local community members – drives our collective long-term success. As it is a constant commitment and a great effort from the whole company, execution of Competitive Edge requires the unwavering commitment of our employees and partners to this vision.”
(Gary Fromer, CEO of DCO Energy)

FIGURE 22:

Shared value, a key catalyst for social licensing

Source: Altermind, inspired by Yang, 2015



SEARCHING FOR INCLUSIVE BUSINESS MODELS

Although shared value creation will be largely determined by a company's individual starting point and its level of maturity to build a social license, a more comprehensive understanding of value can drive companies towards more sustainable stakeholder-centric behaviors.

In the era of shared value, companies that will benefit the most are those that are not only able to share the value with stakeholders, but also those that manage to harness its business potential. To achieve this goal, Rana et al. (2014) provided a framework for business model innovation integrating stakeholders' interests by explicitly considering value destroyed and value missed within the business model[40] (Figure 23) .

Still, despite the widespread embrace of the shared value concept, the tools to put this concept into practice are still in their infancy. Shared value measurement requires aniterative process that is integrated within the business strategy, instead of a one-time or periodic effort separate from measuring business performance. When companies do not rigorously track the interdependency between social and business results, they miss important opportunities for innovation, growth, and social impact at scale.

EXPERT POSITION 14

Engaging stakeholders to make business models resilient over the long term

"Stakeholder engagement is a real challenge of our business model but this change is the condition of viability and resilience of our projects over the long term. As stakeholders within a territory and a value chain, local players feel they deserve to be included in the value creation and sharing process. This is notably the case in the US in some biogas projects, in which farmers are expecting more transparency on the value created and are looking to capture some of the upsides. Our business models become riskier, with a project IRR that is sometimes higher than shareholders IRR, but this is an opportunity to strengthen our business model's resilience in the long term: we and our stakeholders are on the same team!"

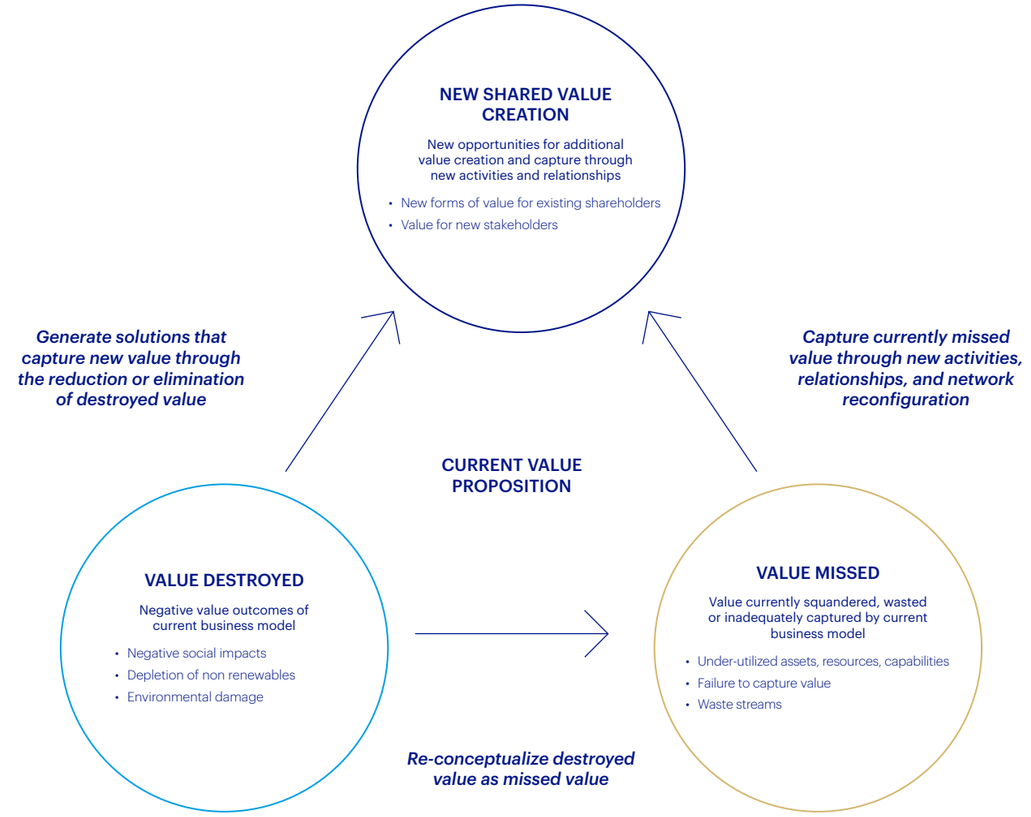
Olivier Guerrini,
VP Biogas Business Unit
at TotalEnergies

[40] N. Bocken, P. Rana, *"A literature and practice review to develop sustainable business model archetypes"*, J ournal of Cleaner Production, 2014, 65:42–56.

FIGURE 23:

Shared value creation with stakeholder-centric business models

Source: Rana and al, 2013



CASE STUDY 8

Sodexo: “La Passerelle”, an impact project based on a new business model

Sodexo has historically emphasized inclusion as a key point of differentiation, performance, and innovation. This commitment is grounded in its corporate responsibility roadmap, contributing to societal and economic development by enriching lives in the communities where it operates.

At its creation, the objective of Sodexo’s department of “societal innovation” was to invent new business models that would meet Sodexo’s ambition to create value for local players and contribute to improving the quality of life in less privileged areas. As part of this commitment, Sodexo has therefore created “tiers-lieux” in less privileged neighborhoods to act as close to the local communities as possible.

In 2021, Sodexo announced the launch of “La Passerelle”, a new business model designed to have a greater impact on employability, health and social cohesion in priority neighborhoods. La Passerelle is first and foremost a place anchored in the heart of the city, bringing together several activities around:

- A vegetable garden: as the economic driver behind the project, the vegetable processing plant will support the model while helping to improve the employability of local residents and to promote a more local, plant-based diet. The facility will prepare 350 metric tons of fresh local produce every year. Half of this will be directed to Sodexo’s usual distribution channels, while the other half will be sold directly to consumers via retail networks;

- A daycare facility: the facility will have 21 places available for residents, as childcare continues to be one of the main obstacles to employment and training. Support workshops will also be offered to parents who are seeking to enter the job market;

- A training room: to compensate for the insufficient availability of training facilities in the community, and respond to local demand, this room will offer skills training led by a local provider;

- A community space: the community space will be jointly managed by local stakeholders and will host a program of activities aimed at residents from the local neighborhood. These activities might include, for example, workshops on the links between health and nutrition.

“We are convinced that alliances on the territory between public and private actors – companies and associations – will make it possible to provide new answers to the major challenges our societies face. La Passerelle is a place that hosts a new economic model. Its specificity is to make the search for positive impact in less privileged territories the starting point of its action. The challenge was to avoid basic philanthropy and try to create a sustainable economic model that can create impact in the long term: to do this, we have become aggregators and catalysts of change to make it sustainable. At the beginning, long before our building was built in Clichy-sous-Bois in 2022, we faced some mistrust from local stakeholders: it took a lot of time to make the model understood by local stakeholders and for us to be recognized as an actor looking to help territories and populations, but we managed it. This initiative reflects Sodexo’s ambition and desire to establish links and alliances between public, private and community organizations. A further 10 similar projects are set to be launched by 2025. This approach is intended to irrigate other corporate practices within the Group to better connect shared value to the core business of Sodexo.”

Isabelle Aprile, Director of Societal Innovation, CEO La Passerelle

Aligning interests and maximizing shared value through enhanced PPPs

A new era for PPPs

In infrastructure sectors, public-private partnerships (PPPs) now tend to fit into a broader perspective, beyond financial performance objectives. Answering the needs of communities, at best value, **they include more and more sustainability and social goals.** They also **take into consideration more stakeholders,** beyond the public authority and end-users, such as local economic players (with local content provisions) or local communities (Figure 24).

This trend has given rise to new concepts and standards around PPPs:

- In line with the Sustainable Development Goals (SDGs), the **“people-first” PPP framework** developed by the UN Economic Conference for Europe (UNECE) and formally endorsed by its Member States aims at making PPPs fit for purpose including accessibility and equity, environmental sustainability, effectiveness, and replicability and stakeholders' engagement[41];

- Coined in the urban development field in the late 2000s[42], the concept of **Public-Private-People Partnerships (PPPPs or 4Ps)** aims at improving the value for money of PPPs by reinforcing formal and informal direct relationships between all Ps, especially between the private sector and the people[43].

As a result, **PPPs become an essential lever of SLO.** But using PPPs as SLO levers faces specific difficulties, such as the number of stakeholders involved, the long lifetime of infrastructure, the constraints of public procurement rules, etc. PPPs must therefore answer two main challenges: obtain the widest possible tacit agreement of the project stakeholders throughout contract life and maximize share value through new contractual approaches.

[41] World Association of PPP, *“Making PPPs fit for the 2030 Agenda”*, April 2021
[42] W. Majamaa, *“The 4th P - People - in Urban Development Based on Public-Private-People Partnership,”* 2008.
[43] C. Boniotti, *“The public–private–people partnership for cultural heritage management purposes”*, Journal of Cultural Heritage Management and Sustainable Development, April 2021.

FIGURE 24 :

Enhanced PPPs

Source: Altermind

	CLASSIC SCHEME	ENHANCED SCHEME
OBJECTIVES	Performance of the service at best value	Integration of sustainability and social goals *E.g. People-first PPPs*
INVOLVED PARTIES	Public entity and private partner	End-users, Local communities, industrial ecosystem *E.g. Public-Private-People Partnerships*
PERFORMANCE OBLIGATIONS	Quality of service	Ecological impact, social obligations, local content
PAYMENT	Depending on performance or frequentation	Depending on ecological or social performance, shared with other stakeholders *(e.g.: energy performance contracts, social impact bonds)*
ASSESSMENT	Often neglected	More central

PPPs as stakeholder governance tools

DURING THE DEVELOPMENT PHASE

To be accepted and supported by all stakeholders, PPP contracts are expected to **reflect a balance between the outcomes of the negotiations held between the public entity and the private partner, and the inputs of public participation processes.**

This is all the more important as public contracts are prone to **third party opportunism,** with 'NIMBY-type' situations where people living near projects may be in favor of them in principle but consider that they will suffer the direct costs or strongest opposition not coming from directly affected local residents.

To face this challenge, PPP procedures tend to evolve and put in place various mechanisms such as:

- Involving stakeholders from the earliest stages of a project and throughout the development of the project (need analysis, preparation of the procedure, procurement);

- Enable the effective consideration of public inputs and, as far as possible, the adjustment of the project and the contract;

- Mitigate the risks associated with stakeholders, including "redistribution" mechanisms (as described below).

THROUGHOUT THE LIFE OF THE PROJECT

Given the long lifetime of infrastructure assets, the objectives of PPPs might evolve over time, for various reasons (need to adapt the infrastructure asset, changes in the economic and social context, new expectations from stakeholders, etc.). **Ensuring ways to adapt contracts while preserving value and maintaining the social license is crucial.** This is why renegotiations are very frequent in all infrastructure sectors [44].

As long as (i) their occurrence does not exceed a certain level, (ii) their content does not address price considerations only, and (iii) they are conducted transparently, renegotiations are a powerful tool to preserve the financial value and quality of service in PPP contracts. Empirical analysis in the French car parking sector has notably demonstrated evidence that there exists – for each specific contract and relationship – an "optimal level of renegotiations"[45].

[44] J. Beuve & S. Saussier, *"'Renegotiations of public contracts: A blessing in disguise?' in Procurement in Focus. Rules, Discretion and Emergencies"* CEPR Press Book, 2021.
[45] J. Beuve & S. Saussier, *"Renegotiations and Renewals of Public Contracts"*, Review of Industrial Organization, 2021.

TABLE 1:

An overview of the contractual infrastructure sectors

Source: J. Beuve & S. Saussier, 2021

GEOGRAPHICAL AREA	SECTOR	PERCENTAGE OF NEGOTIATED CONTRACTS	REFERENCES
France	Highways	50%	Athias and Saussier (2007)
France	Car Parks	73%	Beuve and Saussier (2021)
Latin America and Caribbean	All sectors	68%	Guash (2004)
	Electricity	41%	
	Transport	78%	
	Water	92%	
Portugal	Water	100%	Cruz and Marques
	Road	100%	
Spain	Highways	100%	Baeza and Vassallo
United Kingdom	All sectors	55%	NAO (2003)

EXPERT POSITION 15

Make long-term contracts more flexible

"Initially, renegotiations were a synonym for a 'bad' contract, implying a risk of commodification of the service; they now make it possible to preserve financial value and suitability of service, therefore enhancing social licensing. Renegotiations of long-term contracts are now acknowledged as a signal of good relationships with public authorities, under certain conditions."

Frédéric Marty,
CNRS Senior Fellow

"The lack of flexibility in public procurement design and implementation can prevent risk adaptation and hazard limitations. Contractual conditions, such as rates, project designs or service-level obligations, must become more flexible and should be changeable, notably because there is an appetite for renegotiations within the ecosystem. In a world that is constantly changing, this is all the more true for contracts over several decades such as greenfield concessions that are financed over 30 to 40 years. For instance, due to the evolution of mobility, we will have to find new usages for parking lots to adapt to new needs (logistics, soft mobility, etc.)."

Serge Clemente,
CEO Indigo

PPPs as value-creation and value-sharing tools

THE INCLUSION OF SUSTAINABILITY AND SOCIAL ASPECTS

PPPs tend to adopt **a more comprehensive approach to value,** with the inclusion of social and environmental criteria in the Most Economically Advantageous Tender (MEAT) assessment. This impacts the way procedures are handled, giving more importance to sourcing and favoring negotiated procedures, which enable more flexibility.

MEAT also has major consequences on the contractual architecture of PPPs, with **the rise of performance contracts,** which link the remuneration of private partners to the achievement of specific criteria, including environmental and/or social ones. **Performance contracts** have been developed in the energy sector: energy performance contracts are designed to ensure project owners make energy savings in buildings, the payment due to the private partner depending on energy efficiency improvements. **This type of contract is spreading to new sectors, such as waste management and water treatmen**t and provides increased opportunities for creating social value through various indicators (energy or waste savings, involvement of social economy companies, etc.) linked with systems of rewards and penalties.

FOCUS 7

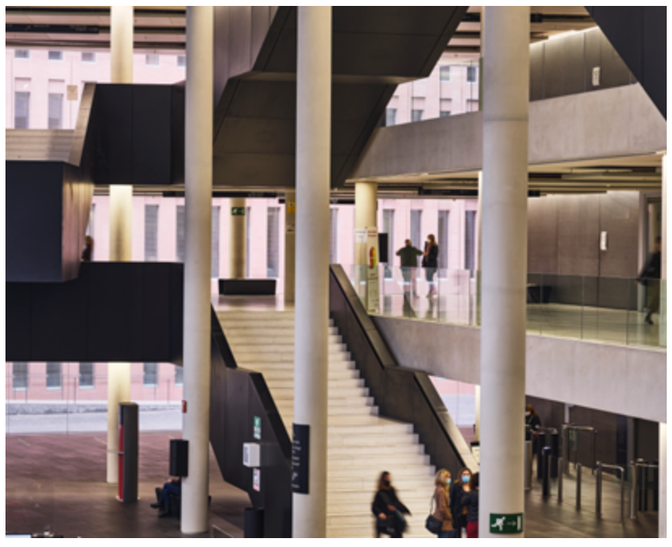
Social impact bonds, an innovative approach: the case of the Hemisphere project

As the infrastructure-based approach to PPPs might not always achieve the expected levels of efficiency and effectiveness, new approaches such as social impact bonds (SIBs) can serve as a benchmark for innovating policy in the PPP model, with strong emphasis on achieving easily quantified results due to generated social value[46].

SIBs are new contractual approaches which tend to include more social criteria and aim at rolling over the risk carried in social programs from service providers to private investors, whose repayment and level of financial return are dependent on the achievement of social performance objectives. SIBs have still a limited reach: about $546 million have been invested in 213 social impact bonds (SIBs) worldwide since 2010[47]. But it is worth noting that they have been used in the infrastructure sector, in particular in France with the Hemisphere project.

The Hemisphere Social Impact Fund was launched in 2017 in France to provide emergency accommodation to homeless people, refugees, and asylum seekers[48]. Amounting to €200 million, including €100 million from seven mainstream investors, it is deemed to be one of the largest SIBs in Europe[49].

Performance – and consequently payment mechanisms – is tracked monthly against four main social indicators, measurement relying on administrative data reported by the social workers and verified annually by an independent auditor.



[46] H. Kociemska, B. Półltorak, *"The Influence of Social Impact Bonds on Public–Private Partnership Success: The Case of Higher Education"*, European Research Studies Journal, volume XXIV, Issue 3, pp. 423-438, 2021.
[47] Blavatnik School of Government, International Network for Data on Impact and Government Outcome (INDIGO) database.
[48] A.Goumiri & S.Saussier, *"Rémunérer les opérateurs de services publics selon leur impact social: SIB, CIS et autres formes contractuelles"*, Les Policy Papers de la Chaire EPPP, Sorbonne Business School, 2020.
[49] European Investment Advisory Hub, *"Case study: Hémisphère social impact fund, France"*, October 2021.

FIGURE 25 :

Framework Hemisphere Project

Source: European Investment Advisory Hub, 2021

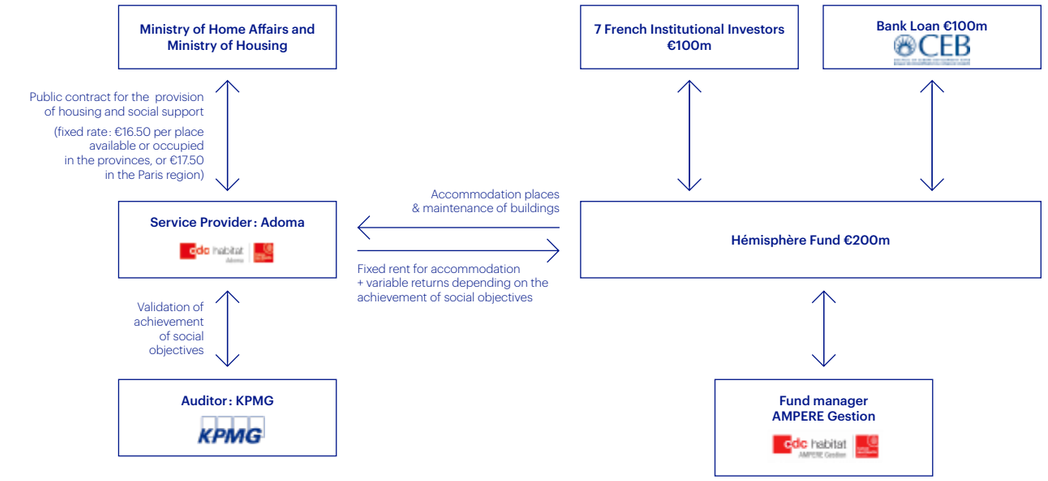


TABLE 2 :

Performance measurement, Hemisphere Social Impact Fund

Source : European Investment Advisory Hub, 2021

OUTPUTS	METRIC	OUTCOME TARGET	EVIDENCE
Children school enrolment	% of enrolled children (aged from 6 to 16)	95%	Schooling proof
Personalized support	% of eligible persons who signed a personalized project	90%	Signed personalized support project
Access to social rights for those who are eligible	% of eligible households who asked for social or had access to social rights (family welfare payments, RSA)	80%	Notification from the Illness Insurance primary fund or other social organizations
Service outcome	% of eligible households that have benefited from an exit solution	70%	Notification of allocation of accommodation or integration accommodation

EXPERT POSITION 16

Finding the right performance measurement

"A key success factor of contracts based on performance is to define and monitor good indicators, which should be directly linked to the project, easily verifiable and comparable, and accepted by all stakeholders. This requires a constructive dialogue between the public grantor and its private partners and, sometimes, an innovative approach."

Stéphane Saussier,
Professor at IAE
Paris-Sorbonne

PROFIT-SHARING AND REDISTRIBUTION MECHANISMS

Some PPP contracts include remuneration mechanisms aimed at securing value for both public and private partners through the control of the evolution of the operator's revenues during the PPP's duration.

Such profit-sharing provisions **prevent situations of "over-profitability"** – which are detrimental to SLO – from occurring. They can take the form of endogenous duration depending on revenues, reduced prices when periods of high revenues occur, or better fortune provisions. As an illustration, French highways concession agreements include such types of provisions.

Beyond contractual mechanisms between the public and private partners, formally extending the sharing of revenues to the people (local communities, end-users) through redistribution mechanisms can be a huge lever for building and maintaining the social license over time:

- **Local opposition to some infrastructure projects (such as renewable energy) often stems from a perception of "local inequity":** negative externalities of the projects are concentrated in the local stakeholders' area, while benefits spread at the macro level;

- In addition to stakeholder engagement processes, **integrating directly-impacted stakeholders into value-sharing mechanisms** allows for an appropriate balance between general benefits and local damages;

- **Possible redistribution mechanisms** may include local tax rebates, discounts on the service prices (e.g. electricity, transports, etc.), financial compensation in case of loss of real estate value.

As an example, **community benefits agreements (CBAs)** – which enable firms and local communities to converge on a mutually acceptable sharing of value through a pre-agreement on the compensation – can increase companies' ability to implement projects smoothly and stay on schedule & within budget. Indeed, **CBAs provide a clear mechanism for firms and stakeholders to reach a shared understanding of the development of the project,** specify ex ante the mechanisms through which unanticipated concerns will be addressed during the project development and provide low-cost mechanisms for resolution of conflicts and a legally binding agreement that can be used in court[50]. They are used in various sectors worldwide, including for instance windfarms projects.

[50] K. Odziemkowska & S. Dorobantu,*"Contracting beyond the market"*, Organization Science (Volume 32), June 2021: an empirical assessment of CBAs in the Canadian mining industry provides evidence that CBAs create value for a firm when they are signed with communities who can obstruct a firm's access to valuable resources through their strong property rights or their ability to mobilize against the firm using social movement tactics (such as protests or blockades) or institutional tactics (such as legal action or interference in the regulatory process).

VAUBAN IP'S SOCIAL LICENSE STRATEGY

Key takeaways

→ Vauban IP's philosophy is to invest in and develop essential infrastructures which impact, which impact people's lives over several generations.

→ Vauban IP intends to promote a sustainable vision of business and investment with its societal and stakeholder-centric approach.

→ Over the years, this philosophy has enabled Vauban IP to build partnerships with local stakeholders and industrial companies as well as sector platforms (in digital infrastructures, car parks, smart metering, EV charging, district heating, transport) that are generating consistent proprietary deal flow, a key element of the firm's success .

→ Following the reflection cycle conducted for the present report, Vauban IP has decided to strengthen its commitments and systematize its methodology to get and maintain its social license, secure the performance of its assets, and more generally, to enhance its projects' shared value in the long-term.

Vauban IP's ambition

As a part of its long-term strategy, Vauban IP **considers all interests in building a common solution for each project, with the whole ecosystem of stakeholders** including shareholders, asset operators, public counterparties, local communities, lenders, co-investors, subcontractors, etc..

Vauban IP has always been convinced that collective efforts and proactive participation of infrastructure players to resolve local issues serves long-term sustainability goals and reinforces the infrastructure sector's credibility in its role toward the society.

Vauban IP's positioning

To perfect its sustainable and stakeholder-centric vision of business and investment, **Vauban IP has decided to stress the importance of "proactivity" and "systematization" in the definition of its projects' SLO.**

CASE STUDY 9

Axione: promoting the social positive impacts of CAP FIBRE project

In line with its commitment to give rural communities access to digital infrastructure, the Telco operator Axione aims to contribute to reducing social inequalities.

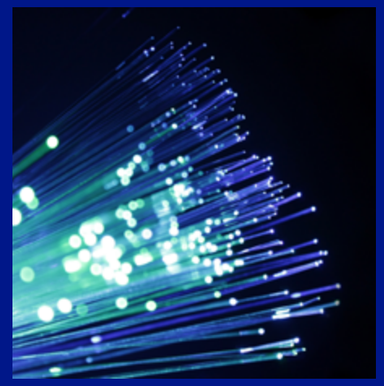
In 2021, Vauban and Axione conducted an impact report to measure the socio-economic impact of the CAP FIBRE initiative, a 25-year superfast broadband project for rural areas in northern France (and more particularly in the Nord and Pas-de-Calais departments).

The results of their ambitious local social integration and vocational training program they put in place in collaboration with the local public authorities are as follows:

- 241 jobs had been created to help people find work;

- More than 440,000 hours of social integration were done between 2017 and 2021;

- Nearly 80,000 hours of training were completed with the creation of a "skills booklet" to improve support for local industrial professionals.
As part of the project, the CCI of Hauts-de-France conducted a survey that showed a strong correlation between digital technology and employment: 75% of industrial companies surveyed consider that one of the main contributions of fiber is to streamline remote working and



collaboration, and 89% of respondents in the business services sector consider that it stabilizes or even increases the number of people in employment in rural areas.

The impact study also highlighted the critical need to address digital precarity and digital illiteracy to support the inclusion of people most cut-off from technology. As a result, Axione has reaffirmed its objective to work with all stakeholders to develop inclusive solutions, specifically by maintaining and amplifying its support of the local public authorities' actions in these areas.

Following the success of the project, CAP FIBRE and the public authority have stepped up their partnership to promote local innovation, to ensure the digitalization of the public sites by responding to public concerns and developing solutions to combat climate change.

Axione is resolute to communicate its achievement with stakeholders to strengthen its positive and lasting impact on territories and build a long-lasting SLO.

"By supporting the development of the territory through the installation of our networks, we contribute to improving the lives of citizens and the competitiveness of businesses. The CAP FIBRE project is a typical example of efficient digital infrastructure, allowing digital access to health, education, culture, remote work, etc.. We are a local player, at the service of users and territorial issues.
A SLO is a goal for the entire company: from top management to employees in the field."

Eric Jammaron,
CEO of Axione

FIGURE 26:

Building a social license to invest with a stakeholder-centric vision

Source: Altermind

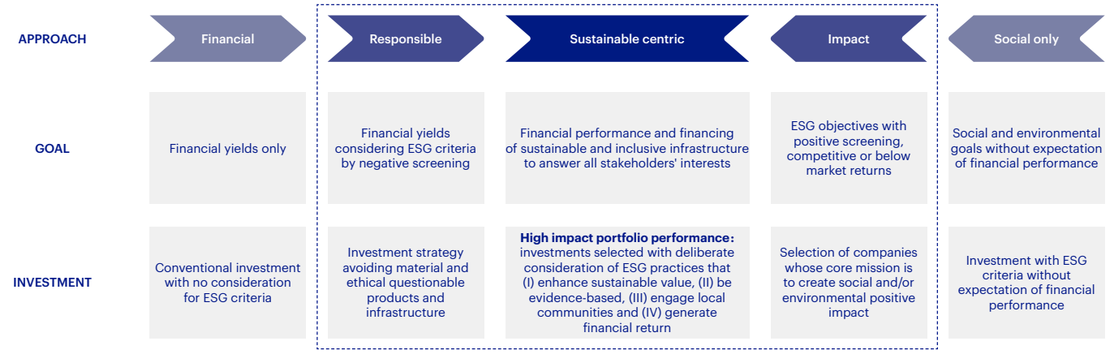
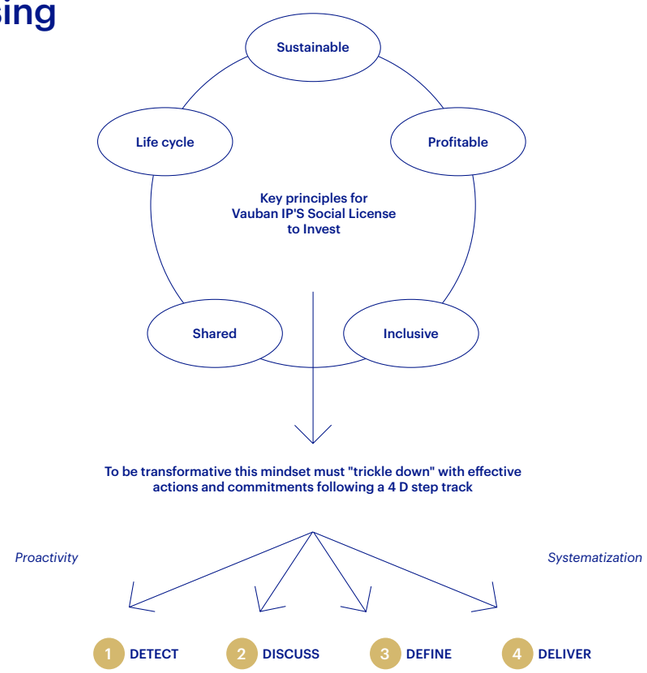


FIGURE 27:

Vauban IP's approach to social licensing

Source: Altermind, with Vauban IP



A "4 Ds approach" to build Vauban' SLO strategy

To follow the path towards a long-lasting social license to invest, Vauban IP has developed a 4-D-step track strategy

To build and maintain its social license, Vauban aims at adopting a comprehensive strategy tailored to the stakeholders needs and the profile of each project (greenfield/brownfield, geography, etc.). This strategy will follow a 4 Ds approach:

1 **DETECT:** map the ecosystem of stakeholders ("Know Our Stakeholders") to spot the friction points, understand the divergence of interests, and identify where the consensus gaps lie by:

- Systematically creating a stakeholder mapping based on a SLO diagnostic in the due diligence phase;

- Defining SLO risks and opportunities with the different types of stakeholders;

- Adjusting the investment accordingly: in practice, Vauban looks to invest in projects that benefits a large number cares for the interests of society;

- Following the SLO evolution through the entire asset management investment phase.

2 **DISCUSS:** communicate transparently with the different identified stakeholders on the features of the asset and engage discussions to reasonably be alerted to potential specific stakeholders' negative perceptions, benefit from constructive inputs, and figure out actions that could weigh on perceptions. According to the phase and structure of the project, the discussion could be fully directly engaged with the stakeholders or partially or fully interfaced by the contracting public authority and/or the regulator.

3 **DEFINE:** identify key interventions to grant stakeholder alignment, and when needed key actors of change, looking at how to close potential specific consensus gaps by:

- Designing action plans adapted to the different stakeholders impacted, depending on the project profile potentially with the active participation of key stakeholders;
- Presenting the SLO action plan during AGMs or Board of Directors meetings for validation and implementation in the business plan of infrastructure projects;
- Engaging asset managers in the design, validation, and update of the SLO action plan:

  — Promote the participation in local initiatives in-line with SLO action plan;

  — Help asset managers in the monitoring and measurement of sustainable value creation — notably co-benefits whenever possible — and to report them to the Board of Directors and potentially to AGMs;

  — Potentially, fix SLO-related KPIs in the Board remuneration.

- As a shareholder considering sharing extraordinary benefits in the most adapted way according to the case (pricing moderation for the end users when having a direct relationship with them, adapting terms with the contractors when the service of end users is interfaced by a local authority or through local initiatives when potentially the other local stakeholders are negatively affected).

4 **DELIVER:** effectively deploy the action plan for sustainable and equitable performance and measure it with clear KPIs. Guided by accurate and transparent data, communicate progress to ensure positive stakeholder engagement in future challenges by:

- Defining and integrating SLO indicators and targets in ESG tools;

- Assessing progress in action plan deployment, providing assistance to the asset managers when needed and promoting achievements;

- Communicating annual progression with stakeholders.

APPENDIX 1

BIOGRAPHIES OF EXPERTS

ROBERT BOUTILIER
Robert Boutilier is a stakeholder relations consultant. He is also a Visiting Researcher at the University of Eastern Finland's MECES (Minerals, Energy, and Circular Economy in Sustainability Transitions). He provided strategic advice for over 35 years at the Center for Sustainable Community Development (DFu) and at the Australian Centre for CSR.

His experience ranges from the board rooms of financial institutions in the developed world to subsistence villages in remote regions of the developing world. He has developed techniques for measuring the Social License and the socio-political risk in stakeholder networks. His Stakeholder 360 technique produces strategies for sustainable community development and uses machine learning and computational language tools for detecting and describing the political dynamics around any organization's activities.

He is also the author of The Social License (2018), A Stakeholder Approach to Issues Management (2011) and Stakeholder Politics (2009).

LAURENT CORDONIER
Laurent Cordonier is an external scientific collaborator in sociology and cognitive sciences, attached to the University of Lausanne and the Paris Diderot University. He is also Director of Research at the Fondation Descartes, which aims to fight against all forms of disinformation and manipulation of information. Before obtaining a PhD in Social Sciences from the University of Lausanne in 2016, he worked as a Scientific Coordinator and as a Lecturer at the Center for Cognitive Sciences of the University of Neuchâtel. His research focuses on the processes of political and religious radicalization and the mechanisms of adherence to conspiracy theories.

His interdisciplinary approach to these themes allows him to understand the social and cognitive biases, using methods ranging from statistical analysis of big data to psychological experiments in laboratories. He was a member of the expert commission "Enlightenment in the Digital Age" chaired by sociologist Gérard Bronner, whose work was submitted to the French President in January 2022. Laurent has published several studies in scientific journals such as the European Journal of Social Sciences, and the British Journal of Developmental Psychology. He is the author of La nature du social : L'apport ignoré des sciences cognitives, Presses Universitaires de France, 2018.

SINZIANA DOROBANTU
Sinziana Dorobantu is currently an associate Professor at NYU Stern School of Business. Her research interests span the areas of nonmarket strategy, global strategy, and political economy.

She researches the strategies through which firms build relationships with different "nonmarket" stakeholders (local communities, governments, nongovernmental organizations) to gain and maintain support for their operations in different institutional environments. More specifically, she examines how firms engage and govern their relationships with these various stakeholders and the extent to which such engagements affect the financial value of these firms.

RODOLPHE DURAND
Rodolphe Durand is the Joly Family Professor of Purposeful Leadership at HEC-Paris, and the founder and academic director of the Society and Organizations Institute launched in 2009. His areas of research are corporate leadership and CSR policies, and their links to performance and competitive advantage. For his work, he has received awards from the American Sociological Association (2005) and the European Academy of Management (2010). He was also elected Fellow of the Strategic Management Society (2014) and received an honorary doctorate from UC Leuven (2019). As an advisor, senior advisor, and member of boards and mission committees, he has helped numerous organizations establish their competitive advantage and develop and implement strategies with high social and environmental impact.

PATRICE GEOFFRON
Patrice Geoffron is a professor of economics at the University of Paris-Dauphine. He is also a member of the "Cercle des Économistes" and a founder of the Dauphine Economics Research Laboratory (LEDa). Currently, he runs its energy-climate team and coordinates various research chairs (notably the Climate Economics Chair created in 2010). He is the editorial manager of the Economics and Policy of Energy and the Environment journals and the Journal of Management and Network Economics. Patrice was a partner for 10 years in an information technology consulting firm and has participated in numerous expert missions in the transport sector (SNCF, ADP, etc.). He was also a member of the support team for the Citizen's Climate Convention.

Patrice is currently a special academic advisor at Altermind.

FREDERIC MARTY
Frédéric Marty is a research fellow at the CNRS within the Research Group in Law, Economics and Management (University of Nice Sophia Antipolis), co-leader of the Strategy and Regulation of Markets (SRM) project and of the Law component. He is also a researcher affiliated with the OFCE (Sciences Po Paris), the EPPP Chair (IAE de Paris) and CIRANO (Montreal). His work focuses on the economics of public contracts as well as on competition law and economics. Frédéric Marty has been a member of the College of the French Competition Authority (Autorité de la Concurrence) since October 2019 as a qualified personality for the regulated legal professions. Since October 2021, he is also a member of the High Council for Associations (Haut Conseil à la Vie Associative), as a qualified personality.

THIERRY PHILIPPONNAT
Thierry Philipponnat is co-founder and Chief Economist of Finance Watch. He is a member of the French Financial Markets Authority (AMF) and a member of the Sanctions Committee of the French Banks and Insurance Companies Supervisor (ACPR). At the AMF, he chairs the Climate and Sustainable Finance Commission as well as its Market Consultative Commission. He is part of ACPR's Climate and Sustainable Finance Commission and a member of its Scientific Committee. After graduating from Sciences Po, he worked as a banker and a financial market professional for many years. He led the economic think tank Institut Friedland and was a member of the French Sustainable Investment Forum between 2015 and 2017. He worked for the European Commission in its Technical and Expert Group on sustainable finance where he focused on the extension of the EU taxonomy.

STÉPHANE SAUSSIER
Stéphane Saussier is a Professor of Economics and Management at the IAE Paris Business School of the University of Paris 1 Panthéon-Sorbonne and a part-time Professor at the Blavatnik School of Management of the University of Oxford. He has headed the research chair on the Economics of Public-Private Partnerships at IAE Paris Business School since 2009, having also been the Director of the school's MBA Program and Master of Business Administration between 2009 and 2018.

Stéphane's work focuses on the efficiency of public procurement and its contractual modalities. He particularly focuses on the study of public-private partnerships, especially in their application to water distribution networks: he was notably responsible for the Water Project of the Florence School of Regulation at the European University Institute of Florence between 2014 and 2020 and co-authored with Simon Porcher Facing the Challenges of Water Governance (Palgrave MacMillan, 2019). His articles on these topics are published in international journals such as Applied Economics, the Journal of Economics and Management Strategy and the Journal of Economic Behavior and Organization. He is also the author of several books dedicated to these issues, including Économie des partenariats public-privé (De Bloeck Supérieur, 2015) and Master Management des entreprises (Eyrolles, 2013).

KERRY SCOTT
Kerry Scott is a consultant at Mott McDonald specialized in social inclusion and development. She provides research, consultancy, assessment and advice for local, national and international clients in both the public and private sector. She has extensive experience in delivering stakeholder consultation and engagement activities. Her work spans a range of sectors including health, transport, environment, energy, international development, buildings and equality and diversity. She previously worked at SQW Consulting and was a policy adviser at the greater London Authority for two years and as a political assistant at Norfolk County Council for two years.

SIMON WHISTLER
Simon Whistler currently leads the Principles for Responsible Investment on real assets. He is responsible for developing and implementing the PRI's strategy for real assets, and across private markets more broadly. He previously worked at Control Risks for almost 11 years where he was responsible for the strategic direction and growth of Control Risks' political and social risk consulting business. He is specialized in risk management, analysis and political risk analysis.

APPENDIX 2

GLOSSARY

AR/VR	**Augmented Reality / Virtual Reality**
ADP	Aéroports de Paris
AUM	**Assets under management**
CNRS	Centre National de la Recherche Scientifique
CSR	**Corporate Social Responsibility**
EDF	Electricité de France
ESG	**Economical and Social Governance**
EU	European Union
EV	**Electric vehicle**
CBAs	Community Benefits Agreements
GHG	**Greenhouse gas**
GW	Gigawatt
IFOP	**Institut français d'opinion publique**
KPI	Key performance indicator
MEAT	**Most Economically Advantageous Tender**
NFDR	Non-Financial Reporting Directive
NIMBY	**"Not In My BackYard"**
OECD	Organisation of Economic Co-operation and Development
REE	**Red Elétrica de España**
PPP	Public-Private Partnership
SDGs	**Sustainable Development Goals**
SFDR	Sustainable Finance Disclosure Regulation
SIBs	**Social Impact Bonds**
SLI	Social License to Invest
SLO	**Social License to Operate**
SNCF	Société nationale des chemins de fer
UN	**United Nations**
UNECE	United Nations Economic Conference for Europe
UNEP	**United Nations Environment Programme**
UNPRI	United Nations Principles for Responsible Development
USD	**United States Dollar**

APPENDIX 3

MAIN BIBLIOGRAPHIC REFERENCES

ARTICLES

K. Appunn, *"Next German government's key climate and energy plan in 2021 colation agreement"*, Clean Energy Wire, 2021.

K. Appunn and J. Wettengel, *"Germany boosts renewables with "biggest energy policy reform in decades""*, Clean Energy Wire, April 2022.

J. Beuve & S. Saussier, *"Renegotiations and Renewals of Public Contracts"*, Review of Industrial Organization, 2021.

J. Beuve & S. Saussier, *"Renegotiations of public contracts: A blessing in disguise?"* in Procurement in Focus. Rules, Discretion and Emergencies (CEPR Press Book), 2021.

N. Bocken, P. Rana, *"A literature and practice review to develop sustainable business model archetypes"*, Journal of Cleaner Production, 2014, 65:42–56.

C. Boniotti, *"The public–private–people partnership for cultural heritage management purposes"*, Journal of Cultural Heritage Management and Sustainable Development, April 2021.

R. Boutilier, I. Thomson, *"Modelling and measuring the social license to operate: fruits of a dialogue between theory and practice"*, 2011.

R. Boutilier, *"Impact assessment and project appraisal"*, 2014.

R. Boutilier, *"Frequently asked questions about the Social License to Operate"*, Impact Assessment and Project Appraisal, 2014.

R. Boutilier, *"A measure of the Social License to Operate for Infrastructure and Extractive Projects"*, November 2017.

Cranmer et al., *"Worth a thousand words: Presenting wind turbines in virtual reality reveals new opportunities for social acceptance and visualization research"*, Energy research & Social Science (volume 67), September 2020.

European Investment Advisory Hub, *"Case study: Hémisphère social impact fund, France"*, October 2021.

P. C. Godfrey, C. B. Merrill, & J. M. Hansen, *"The relationship between corporate social responsibility and shareholder value: An empirical test of the risk management hypothesis"*, Strategic management journal, 30(4), 2009, 425-445.

A. Goumiri & S. Saussier, *"Rémunérer les opérateurs de services publics selon leur impact social: SIB, CIS et autres formes contractuelles"*, Policy Papers of the EPPP Chair, Sorbonne Business School, 2020.

M. Johnstone-Louis et al. *"Business in times of crisis"*, Oxford Review of Economic Policy, 2020, Volume 36, Number S1, pp242-55.

S. Kim, G. Lee & H. G. Kang, *"Risk management and corporate social responsibility"*, Strategic Management Journal, 42(1), 2021, 202-230.

N. Landsbury et al, *"Social Licence to Operate: Understanding how a concept has been translated into practice in energy industries"*, Journal of Cleaner Production, 2015, 86:301-310.

W. Majamaa, *"The 4th P - People - in Urban Development Based on Public-Private-People Partnership"*, 2008.

S. Marsh and M. Chambers, *"Germany unveils plans to accelerate green energy expansion"*, Reuters, April 2022.

Mitchell, R. K., Agle, B. R., & Wood, D. J, *"Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts"*, Academy of management review, 1997, 22(4), 853-886.

K. Odziemkowska & S. Dorobantu, *"Contracting beyond the market"*, Organization Science (Volume 32), June 2021.

World Association of PPP, *"Making PPPs fit for the 2030 Agenda"*, April 2021.

BOOKS

R. Boutilier and I. Thomson, *The Social License: The Story of the San Cristobal Mine*, Routledge, 2019.

E. Ochieng, A. Price, D. Moore, *Major Infrastructure Projects: Planning for Delivery*, Palgrave, 2017.

K. Schwab, Stakeholder Capitalism: *A Global Economy That Works for Progress, People and Planet*, Wiley, 2021.

REPORTS

EDF, *"Le solaire photovoltaïque en chiffres"*.

European Commission, *"REPowerEU Plan, COM/2022/230"*, May 2022.

McKinsey Global Institute, *"The case for stakeholder capitalism, 2020.* OECD, *Global Outlook on Financing for Sustainable Development 2021: A New Way to Invest for People and Planet,"* 2020.

Principles for Responsible Investment, *"Closing the funding gap: The case for ESG incorporation and sustainability outcomes in emerging countries,"* 2022.

United Nations Global Crises Response Group, *"Global Impact of war in Ukraine on food, energy and finance systems: Brief no. 2,"* June 2022.

United Nations Office for Project Services, *"Infrastructure for Climate Action"*, October 2021.

Vauban IP, *"Sustainability charter"*, 2020.

Vauban IP, *"Building infrastructure portfolios for long term"*, November 2019.

World Economic Forum, *"4 big infrastructure trends to build a sustainable world"*, The Davos Agenda 2021, January 2021.

World Bank Group, *"Stagflation Risk Rises Amid Sharp Slowdown in Growth"*, Global Economic Prospects, June 2022.

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