



+ Environmental
Services



A new era of sustainability



Our sustainability framework focuses on early exploration and concept studies to determine what the future of a particular operation or its environment can and should be. We bring together a wide variety of stakeholders to contribute and influence the outcome throughout the Project lifecycle.

With a comprehensive toolkit, workshops, and scenario planning, we find synergies between the needs of the project and the capacity of the host community. The result is a roadmap for sustainable economic and social growth for affected communities, our clients, and their stakeholders.

Ultimately, the goal is to leave a lasting legacy in the affected community—one greater than the project itself. We want our work to be a catalyst for long-term growth. Regardless of the project's lifespan, we must always consider the economic evolution the affected communities will be left to deal with when we leave. We need to nurture long-term relationships and make decisions that allow us to operate and live in our project communities with integrity.

Only by having our own house in order, knowledge, experience and expertise can we help our clients respond to the risks and opportunities associated with climate change and how these will affect their businesses and operations.

We collaborate with our clients to demonstrate planning, engineering, and construction

solutions that will adapt to climate change and meet ongoing performance measures with resilient designs. We thrive on meeting the challenges that groundbreaking, innovative projects present. The rapid growth and power of new digital technologies are providing a further opportunity for us to work with our clients to develop innovative, sustainable solutions that create long-lasting value. By joining forces to maximize our efforts, we believe we can protect natural and economic resources even as we cope with declining assets and unprecedented climate conditions.

Our people

Effectively managing the health and safety of our own and our clients' employees, contractors, and the public is a critical aspect of any project. A core value of our organization, this commitment to safety and health permeates all we do. We are constantly evaluating and re-evaluating health and safety systems, ensuring that they not only meet minimum expectations and comply with applicable legislation but also incorporate best practice strategies as cornerstones.



Environmental and Social Impact Assessment

A step ahead. An essential, core value. Nothing is more important than the health and safety of our employees, clients, and partners.

Navigating through today's complex regulatory environment requires a team of experienced ESIA and permitting professionals with demonstrated success obtaining approvals to keep permitting off the critical path. At the core of our strategy is an integrated and holistic approach to project planning that drives responsible business investment and social performance by ensuring environmental and social needs are considered throughout the engineering design and execution process. To ensure 'fit for purpose' ESIA and permitting outcomes, our global team of government relations and regulatory analysts, biologists, technical modellers and

social practitioners partners with local experts, blending international best practices and standards with local knowledge, expertise and relationships. Regardless of the scale of your project, from a retrofit, to brownfield expansion or greenfield remote site, Hatch Environmental Service Group (ESG) customizes our strategic regulatory approach to suit your needs, while meeting or exceeding compliance requirements. Our philosophy of 'mitigation by design' emphasizes our belief that triple bottom line outcomes (social, environmental and economic) are not only attainable, but a pre-requisite to build a sustainable future.

Environmental and Social Due Diligence

Due diligence provides an early opportunity to benchmark the environmental and social performance of a project against national standards and best international practice, whatever the scale, wherever the location. Due diligence is a short-term exercise having long-term financial and environmental gain.

The early identification of environmental and social risks and opportunities is proven to contribute to sustainable development. It is an integral part of organizational mergers and acquisitions.

ESG supports clients in assessing the issues and risks presented by a project with the objective of identifying fatal flaws or red flags that may arise from the environmental, social or biological aspects affected by the project or associated elements.

A due diligence process requires a systematic and robust method to focus the investigation of issues and aspects. Typically, the process will address the range of organizational processes at a strategic and operational level, incorporating in-depth review of management systems, operational procedures, regulatory compliance and engagement with parties.

Hatch works collaboratively with clients to provide a comprehensive view of the risk profile; and the next steps to move the project forward. This process requires contact and co-operation with all stakeholders.

The ESG team has considerable experience in delivering due diligence projects; each project utilizes a combination of international and local expertise that allows for integration of international best practice with an understanding of local requirements and

conditions. This is supported with technical expertise in engineering, planning and financial analysis providing in-depth analysis, as appropriate.

Our experience in delivering due diligence projects spans the globe. ESG works with clients worldwide to provide services tailored to project requirements, including:

- Review of international and national environmental and social performance requirements
- Independent review of existing project studies, surveys and models to identify gaps and shortcomings
- Management of processes
- Engagement with external and internal stakeholders
- Development of Action Plans to address environmental and social issues and risks
- Development of management plans for construction, operation, closure, decommissioning and care and maintenance phases
- Services are complemented by expertise in Geographical Information Systems and graphic design to ensure that data presentation is readily accessible.

Climate Change

We are helping our clients identify climate change risks to their infrastructure and operations and develop practical measures to mitigate risks

Climate change is one global threat among several that are leading to a series of complex transitions. Action today indicates that we will take steps to transition toward a low carbon economy. We are also expecting a technological transition, which will be a source of disruption, but also a solution not only for low carbon, but other global transitions as well.

The interdependence of the low carbon and technological transitions means that all organizations, including Hatch, must understand how the path of one will impact the other.

Technological advancement, not just in clean technologies, but also in artificial intelligence, robotics and infrastructure networks will have

a profound effect on economic activity, but in a way that is still difficult to predict. Outcomes may be positive (e.g., greater efficiency and productivity) or negative (e.g., displaced workers depressing consumption and growth).

Assessing potential future outcomes has become increasingly challenging as trends of the past are much less likely to be indicative of future events. The rapid pace of global innovation and ambitious carbon reduction objectives are just two of the transformative shifts requiring an evolution in strategic planning.

To mitigate the worst impacts of climate change, the global scientific community, business leaders and governments have agreed that the world



must limit temperature rise to 1.5 – 2°C above pre-industrial levels. Even if we are successful at limiting the temperature increase to 1.5 °C, we will still experience changing weather patterns with profound impacts on physical infrastructure. These will vary by region and will be magnified at anything higher than 1.5 °C.

Indicators of a shift to a low carbon economy include changing requirements for access to capital, shifting policies, laws and regulations, and a change in societal expectations that impacts permitting, operations and brand reputation. We've already observed a noticeable movement forward on a low carbon trajectory in all three indicators.

Hatch's Climate Change and Sustainable Development team is continuously monitoring these indicators and, working with our Digital Solutions and Economic Advisory teams, developing multiple scenarios to assess the potential interdependent impacts of changing weather and technological advancement to our clients and projects.

Let us help.

Strategy

- Conduct climate change risk mitigation (GHG reductions and climate resilience) assessments for new developments.
- Assess climate-related risk and vulnerability for existing and new infrastructure development.
- Identify risk mitigation solutions and feasibility assessments.
- Review new, innovative sources of capital for lower carbon projects and adaptation measures.
- Analyze socio-economic impact of climate change and sustainability-related policy changes, programs, and projects.

Transactional support

- Incorporate the consideration of future weather-related impacts, GHG emissions and health and safety considerations in transaction due diligence.
- Review and assess climate change-related as well as social improvement opportunities for new and existing infrastructure.

- Review operational procedures and physical infrastructure for compliance with climate-related, environmental and social laws, regulations, external commitments, internal policies and potential shifts in expectations over the medium and long term.

Engineering design

- Create and design green infrastructure solutions, including wetland and greenfield conservation, green stormwater management development and soil restoration
- Review climate change-related and other environmental and social risks to the project design, including health and safety.
- Support emergency restoration efforts.
- Develop optimization software to enhance decision making on capital refurbishment or operational improvements within budgetary or GHG emission constraints.
- Develop long term and equal partnership-oriented commitments within the project design to protect and improve financial performance.

Examples of our work include:

- **Mining:** Early advisory on renewable power options and water saving / water storage schemes;
- **Infrastructure:** Assessing and enhancing climate change resilience for ports and green + blue infrastructure engineering for municipal development; and,
- **Energy:** Assessing GHG mitigation potential of potential investments and developing mitigation options.

Ask how we can support you to identify your climate change-related risks, assess opportunities, and develop a plan of action.

Indigenous Engagement

It has never been more important for businesses to work collaboratively with their host communities and truly engage the people who live in them.

A successful project needs to do more than deliver its intended purpose. It needs to provide real, tangible socioeconomic benefits for the surrounding community. It must wholeheartedly embrace the mantra of leaving it better than we found it, ensuring a brighter future for the lives it affects.

Hatch has unprecedented expertise delivering mining, infrastructure and energy projects with the inclusion of Indigenous traditional knowledge, active community participation and socioeconomic development opportunities. We understand that your success is directly tied to knowledge and understanding of the histories, cultures, protocols, values, aspirations and governing nations of Indigenous communities.

As a credit to the success of Hatch's engagement with Indigenous communities, it became the very first engineering, procurement, contracting and management consulting (EPCM) firm to attain Progressive Aboriginal Relations (PAR) certification with the Canadian Council of Aboriginal Businesses (CCAB), recognizing the mutually beneficial impact of business development with Indigenous-owned businesses.

Through our experiences, we understand the connectivity and critical need for alignment and integration between project delivery and social responsibility, including engagement with communities and Indigenous Peoples.

We can deliver that same high standard for you.

Globally, we work closely with clients to:

- Develop strategies to address key issues, creating lasting prosperity and strengthening cultural awareness through project participation
- Develop and deliver Indigenous participation, consultation and disclosure plans
- Implement effective stakeholder engagement, design and analysis for key communities surrounding a project area to identify concerns and opportunities early
- Provide a unique perspective in the development of communication collateral that marries infrastructure design with stakeholder needs
- Identify and incorporate traditional knowledge into project design and considerations
- Develop sustainable employment, training and business development plans for the meaningful inclusion of Indigenous Peoples
- Implement and facilitate project specific agreements between project proponents and Indigenous communities

Examples of Indigenous inclusion on key projects

- **Mining:** Sikumiut Environmental Management (SEM) is an Inuit-owned company from Newfoundland and Labrador. Hatch and SEM joined forces to conduct all work on a mine expansion to provide local insight, environmental permitting and approval services as well as technical support. Together, they blend engineering, traditional knowledge, environmental management and a keen appreciation for Newfoundland and Labrador issues for our client.
- **Infrastructure:** During the planning and assessment stage of an Indigenous owned hydroelectric project, Hatch worked closely with First Nations Band members to ensure that members were retained to participate in field studies during the fisheries and aquatic resources, wildlife and vegetation, geotechnical investigations, and archaeological assessments.
- **Energy:** Hatch has a Joint Venture agreement with First Pac West, a 100 per cent Indigenous owned and operated business. The JV formalizes the strategic relationship to jointly provide a better solution to remote living conditions for project workforces in different sectors around the world. The agreement is supported by the CCAB.



Construction Environmental and Social Management

Construction is usually the first site-based project activity with the potential to cause significant negative environmental and social impacts.

It also may result in significant benefits if planned and managed correctly. The objective of Construction Environmental Management is to implement the mitigation measures and standards required by the client, the environmental impact assessment, environmental permits and the laws and regulations of the host country to manage both positive and negative impacts.

Construction is also an opportunity to start to develop a sustainable approach to management that would continue through operations to closure, creating rather than destroying value.

An effective Construction Environmental Management Plan (CEMP) is multidisciplinary and cross cutting and should be fully integrated into the construction management plans and procedures. Hatch drafts CEMPs with the following goals in mind:

- Linking the objectives and actions in the CEMP to the relevant construction team and activity
 - Keeping communities informed of progress and future activities
 - Building social capital by creating opportunities for and building strong relationships with affected communities
 - Avoiding or minimising negative environmental impacts
 - Assuring 'duty of care' by carefully implementing mitigation measures, monitoring the results and
 - Developing a management system that is responsive to results and incorporates learning into improvements
- Promotes effective communication so that everyone understands the purpose of the CEMP and their roles in its implementation
 - Reducing risk and achieving compliance with the conditions of all environmental approvals and permits.

We know that construction projects, especially those in developing countries, are an opportunity to make a positive difference to the lives of many. Hatch's social specialists work with clients, the construction team and the community to identify benefit streams that link opportunities arising from construction to community needs and aspirations. Supporting partners can be engaged and programmes to provide training and resources can be developed.

Our environmental team understands how construction activities are planned and executed, and from a track record built through many construction projects we understand the potential pitfalls and how to avoid them.

Our management process follows the plan – do – check – act cycle and can therefore easily be integrated into ISO management systems. When requested by clients, Hatch can also develop a CEMP for ISO14001 certification.

Ultimately, Hatch recognizes that a CEMP should be far more than a management plan. It should be a cornerstone to create and grow future social and environmental capital, obtaining a social license and achieving lifelong sustainability.



Environmental Services Project Lifecycle

The Environmental Services Group provides integrated value-add support throughout the project lifecycle for metals and mining, infrastructure and energy projects. These six pillars including Sustainability, Environmental and Social Impact Assessment, Environmental Due Diligence, Climate Change, Indigenous

Engagement and Construction Management are core to incorporating environmental and social considerations to build social license for a project and developer. Our environmental professionals are here to be partners in the success of your initiatives through the duration of the project.





About Hatch

Whatever our clients envision, our engineers can design and build. With over six decades of business and technical experience in the mining, energy, and infrastructure sectors, we know your business and understand that your challenges are changing rapidly.

We respond quickly with solutions that are smarter, more efficient, and innovative. We draw upon our 9,000 staff with experience in over 150 countries to challenge the status quo and create positive change for our clients, our employees, and the communities we serve.

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