YEIP Report 2023

Building the **backbone** of sustainable energy future





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1. About YEIP

Overview

We are a professional association for early-career individuals in the infrastructure segment of Canada's energy industry.

Mission

Empower young professionals to shape a sustainable future with energy infrastructure.

Mandates

- Increase the influence of young professionals in energy policy and industry leadership
- Facilitate a platform for exchange and development of ideas
- Advocate for effective energy infrastructure to accelerate a sustainable energy future

Our Two-Pillared Strategy



Listen to the voice of young professionals

Example Initiative(s):

- Host events, podcasts & panel discussions
- Create an online listening platform: a "bank" for young professionals' ideas



Disseminate what we heard & influence

Example Initiative(s):

- Publish The YEIP Report, highlighting YEIP's perspective on important topics
- Educate decision-makers and the public on young professionals' perspectives
- Participate in decision-making processes

2. Message from YEIP President

During the first half of 2022, YEIP has refined its mission to focus on empowerment of young professionals in the infrastructure segment of the Canadian energy industry. During the second half of 2022, YEIP volunteers were engaged through a series of workshop to refine the organization's strategy for achieving its mission, which put forward two pillars: (1) listen to the young professionals and (2) disseminate what we heard to influence the future. Since this strategy was adopted, YEIP has conducted a series of listening initiatives, including the launch of YEIP Listens podcast series.

In the first episode of <u>YEIP Listens podcast</u>, I was invited to speak about our listening initiatives and the importance of empowering and listening to young professionals in designing a sustainable future. This conversation had three key takeaways:

- First, from definition perspective, the internationally understood definition of sustainable development puts young people as a critical stakeholder group. As defined by Brundtland Commission through the United Nations, sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Therefore, the "future generation" (the young people) must be a critical stakeholder group when the senior leaders and industries talk about "sustainability".
- Second, from representation perspective, young professionals are early in their career
 and are often at the bottom of the decision-making hierarchy in organizations. Therefore,
 despite the criticality of young people as a stakeholder group, there is an inherent gap in
 representation and inclusion of young people in decision-making today. There needs to be
 mechanisms to increase their representation and empower their voice, and YEIP seeks to
 achieve that for its industry segment.
- Third, from future stake perspective, young people must have a say in today's decisions because they have a greater stake in the future. A majority of the senior leaders and decision makers today (CEOs, EVPs, policymakers, and other senior leaders) will be retired in that future, and it is the young people who will have to live in that future and face the consequences of today's decisions. Therefore, since the future we are talking about today is young people's future, it is important for them to have a say in today's decisions.

As these key takeaways highlight, it is imperative that we listen to the voice of young people and empower them to partake in today's decision-making that will have an impact on tomorrow. As such, this report seeks to consolidate what we heard from the young professionals we represent, establish our perspectives as an organization, and disseminate these perspectives.

We encourage governments, industry companies, educational institutions, NGOs, and other stakeholder groups to use this report as an input for devising today's decisions, so that collectively, we can create a more sustainable future.

Ian Sug

President

3. Executive Summary

This report consolidates the voice of young energy infrastructure professionals on **three important topic areas** that will have a significant impact on their future in the Canadian energy industry.

- 1. Sustainable energy future: From climate change and energy mix of the future to energy infrastructure development, what do young professionals working in the infrastructure segment of the Canadian energy industry think about these topics?
- 2. Biodiversity & energy infrastructure: Led by the United Nations, a historic agreement was reached in December 2022 among the Conference of Parties (180+ countries) to protect 30% of ecosystem (land and water) by 2030. Since energy infrastructure is directly built on land and water, this agreement has significantly implications on our industry. What do young energy infrastructure professionals think about this global direction, and how do they envision the industry's future in this space?
- 3. Sustainable jobs plan: The uncertainty of the energy transition poses a profound impact on young energy infrastructure professionals, who have 30+ years of career left to navigate in the energy industry. How do young professionals think our society can make sure that energy transition is equitable and just for all people, including the young professionals in the industry?

Based on the listening efforts that have taken place over the past months, this report suggests paradigm shifts in each of the three topic areas of our industry's thinking:

Topic Area To From 1 Individual asset-based (e.g., Sustainable Systemic infrastructure-based pipeline, solar farm, power plant, **Energy Future** thinking etc.) thinking Energy infrastructure **Biodiversity** Energy infrastructure development as 'net positive' & Energy development as 'net negative' activity that can co-exist and Infrastructure activity for biodiversity create synergies with biodiversity 3 **Under-representation** of young **Recognition** of young people as Sustainable people in the discussion of a critical stakeholder group in Jobs Plan equitable and inclusive energy the discussion of equitable and transition inclusive energy transition

The subsequent sections of this report will expand on these three topic areas, establish the YEIP perspectives, and elaborate on the paradigm-shifts in thinking suggested by the young professionals.

4. YEIP Perspective: **Sustainable Energy Future**

Background

The conversations around climate change and energy transition have gone mainstream in recent years; however, these were global agendas that have developed over many decades. The first Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change was held in 1995 among countries around the globe (UNFCCC, 1995). Through the decades of subsequent negotiations and numerous scientific evidence calling for urgent actions, the Paris Agreement for keeping the rise in global temperature to well below 2 °C above preindustrial levels was adopted by 195 countries (UNFCCC, 2015), and "tak[ing] urgent action to combat climate change and its impacts" was adopted as one of the critical Sustainable Development Goals by the United Nations (United Nations, 2015).

alignment with this agenda, governments around the world are adopting decarbonization and climate action into their national policies, and G7 nations like Canada are leading the way by officially adopting Canadian Net-Zero Emissions Accountability Act to enshrine such agenda into the law (Government of Canada, 2023). Concurrently, private-sector corporations, particularly in the energy industry, are making pledges on net zero by 2050 (with some industries and companies targeting more aggressive timelines), and the discussion of how the energy system, which currently takes up ~73% of global GHG emissions annually (Ritchie, Roser, & Rosado, 2020), will look like in the future has been a heated debate across the globe.

Despite all these alignment efforts, the energy industry's commitment to net zero, and

efforts to envision a sustainable future, there still remains a gap between the current state of society and where the youth population (the future generation) in general wants us to be. For example, as Student Energy's (2023) Global Youth Energy Outlook report highlights, 68% of youth (aged 18-30) in North America are moderately or very concerned about emissions caused by the current energy system and more than 60% feel that more investment is needed than today to fight climate change. Additionally, almost 60% of youth in North America want their country to achieve net zero by 2030, which is a significantly more aggressive timeline compared to the most common commitment of 2050 (Student Energy, 2023). While this highlights the perspectives of youth population in general, however, little is known about the perspectives of the young professionals in the infrastructure segment of the energy industry. We believe that this segment of young professionals requires a particular attention as those are the young professionals who will be building the backbone of the future energy system to address the greatest sustainability challenges of our time.

What do young people, who are already involved in the energy infrastructure industry in Canada, think about these issues, and how do they envision a sustainable energy future? In particular, how do they envision the future of energy infrastructure to achieve that sustainable future? Through our listening efforts, we've collected young energy infrastructure professionals' input and established our organization's perspectives on three critical topics: (1) climate change, (2) future of energy mix, and (3) future of energy infrastructure.

Our perspective

On the topic of climate change

When it comes to climate change, the evidence is irrefutable. Anthropogenic CO2 is causing the Earth to warm, and it is impacting the lives of every citizen. Largely through consumption of fossil fuels resulting in the release of CO2 into the atmosphere, we are experiencing more frequent extreme weather, wildfires, hurricanes, drought, and intense heat waves that impact everyday life (McLean, 2023). Climate change is a critical problem for our generation and now is the time to act. Such sense of urgency is shared among the young professionals in our industry. As an op-ed article by one of our members put it, "one of the single largest brand destroyers [of our industry] for the next generation is when corporate Canada [...] is allergic to the words Climate Change." (Beckel, 2021).

Therefore, YEIP:

- Believes that climate change is a critical problem for our generation and that energy industry holds the key to addressing it;
- Endorses the world leaders' push towards a low carbon future:
- Affirms the notion that significantly more collective actions must be taken than today to address this global challenge;
- At the same time, recognizes that the livelihood of people and riahts development must be ensured while reaching the low carbon objective.

On the topic of future of energy mix

Today, the energy industry takes up ~73% of global GHG emissions annually (Ritchie, Roser, & Rosado, 2020). It is a core contributor to the problem, but it is also the single largest potential solution-provider to this problem. Young professionals recognize this challenge and are excited by the scale of the opportunity.

As World Economic Forum's Centre for Energy and Materials describes, the energy industry is "facing a trilemma"; it needs to ensure (1) emissions reduction, (2) security and reliability, and (3) affordability (Engel, 2023). There is no "silver bullet" or singular solution to the future of our energy mix for solving this trilemma. In fact, many of the reputable scenario reports (IEA, 2021; CER, 2023), including the most aggressive scenario by IRENA (2023), show that a low-carbon sustainable energy future will require many different forms of energy solar, wind, hydro, nuclear, bioenergy, hydrogen, as well as conventional fossil-based sources such as oil or natural gas paired with carbon capture and storage (CCS). We must be able to produce affordable, safe, secure, reliable, and clean energy for everyone, and that means different regions may have different solutions to their energy mix. It is important that we remain agnostic to the different energy sources and utilize what makes sense both from a cost perspective and a practical perspective in different regions of Canada. If we produce clean or low carbon energy at a cost that people can't afford, then we are missing the mark.



However, despite the number of credible energy scenarios demonstrating that the future (Year 2050) will constitute various energies, there is insufficient forms of collaboration among sub-segments of the industry (renewables, gas, electricity, other power generation, etc.) in Canada for creating a sustainable energy future together.

Therefore, YEIP:

- Disagrees with the notion that the future will be dominated by oil and gas by 2050;
- At the same time, also disagrees with the notion that the future will be dominated by renewable energy by 2050;
- Believes that the solution to addressing the greatest challenge of our time (reducing emissions while ensuring the livelihood of people) requires various forms of energies (oil and natural gas paired with CCS, solar, wind, hydro, nuclear, hydrogen, biofuels/biogas, synthetic fuels, etc.) working together towards a common, low-carbon future. The solution will not be one source of energy dominating the society by 2050, and collaboration among industry sub-segments is critical for getting to this future.
- Recognizes that we are running against time and urges industry sub-segments (gas, electricity, etc.) to come to the table and cocreate the future where all sub-segments can synergistically co-exist.

On the topic of future of energy infrastructure

Timelines are short, and 2050 will come fast. To have any hope of achieving our 2030 interim target or be a net zero nation that Canada aspires to be by 2050, new infrastructure will have to be built and built fast. When it comes to energy infrastructure, it is now time to shift away from the current singular asset view and instead consider a more integrated approach. We must also consider the joint development of projects

from the production of energy, through to end user. It is time to move away from focusing on "oil and gas pipeline" projects or "wind and solar farms" projects as singular pieces. In a decarbonized future, these projects will be closely linked and vital in delivering decarbonized energy to Canadians whether it be through electrons and transmission lines or hydrogen through pipelines.

Despite these inevitable interlinkages among different types of assets (pipelines, wind farms, solar farms, etc.) in a decarbonized future, however, Canadian society and its energy industry have put too much focus on a narrow, singular asset view of energy infrastructure. This has led to certain asset types, such as pipeline, become the primary target of controversial campaigns and national political debates, rather than these assets being objectively evaluated based on societal merit and their ability to address the greatest sustainability challenges of our time.

This notion of integrated view of "infrastructure", rather than singular view of "asset", is supported by the thought leaders at the United Nations:

"Infrastructure should not be viewed as individual assets, such as a power plant, a hospital or a water network, but as part of a system with a portfolio of assets that collectively hold great potential to deliver the three pillars of the SDGs: economic. environmental sustainability." and social (UNOPS, 2019, p. 3)

In 2019, seven UN entities have released a joint statement to call for an integrated approach to infrastructure development (IISD, 2019), and this view will shape how countries devise their policies and invest in infrastructure development in the future.

A good example of such integrated view of energy "infrastructure" is demonstrated by Nova Scotia's vision of future energy system put forward by Eastward Energy (see **Figure 1**). Recognizing that a sustainable energy future will constitute various forms of energy and integration of various types of assets, in this future energy system, both electricity (wires) and gas grid (pipelines), along with other assets (solar and wind farms, storages, battery facilities, etc.), all have a role as components of the integrated energy infrastructure.

Therefore, YEIP:

- Adopts the thought leadership of the UN on viewing energy infrastructure as an integrated solution, rather than as individual assets (e.g., pipeline, power plant, etc.);
- Urges governments, educational institutions, industry companies, and advocacy groups to abandon the singular asset view of looking at the industry and adopt the new integrated view of "energy infrastructure";

- Urges policymakers to create a framework for energy infrastructure development by bringing together the various components of energy infrastructure to collaborate and cocreate the vision and the pathways for Canada's low carbon energy future, so that the future projects can be sanctioned and approved based on system-based view, rather than individual asset-based view;
- Envisions a future co-designed by various industry sub-segments (from oil & gas to renewables and electricity) where energy infrastructure development is planned, approved, and executed at a system-level, rather than at a singular asset or project-level. Energy infrastructure development is to be widely recognized as a critical solution for achieving the low-carbon future, and its development process is to be significantly expedited.

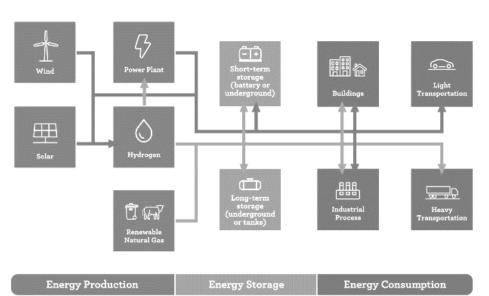


Figure 1. An Integrated Energy System for Nova Scotia (Eastward Energy, 2020)

Note: Figure 1 only outlines the perspective of Nova Scotia, and what the solution looks like for other regions may significantly differ. However, the main point here is that the concept of energy infrastructure as an "integrated solution" is relevant anywhere.

Electricity Grid 🐐 —
Gas Grid 🐧 —

5. YEIP Perspective: Biodiversity & Energy Infrastructure

Background

Led by the United Nations, a historic agreement was reached in December 2022 among the Conference of Parties (180+ countries) to protect 30% of ecosystems (land and water) by 2030. The signatory countries will be devising policies and regulatory frameworks within their own governments to follow through on this commitment. Since energy infrastructure is directly built on land and water, this agreement has significant implications for young energy infrastructure professionals. Inevitably, we need to build more energy infrastructure to (1) address the climate goals and (2) ensure livelihoods and rights to development, but the development of these infrastructures will have an impact on ecosystems.

Through our listening efforts, we've collected young energy infrastructure professionals' input on questions such as: Do we endorse these statements and targets established bγ Kunming-Montreal Biodiversity Framework? If we do agree with these agreements. how can energy infrastructure help achieve the vision to "live in harmony with nature"? If we disagree, what revisions to the framework do we think are required?

Our Perspective

On the biodiversity framework and statements from COP-15

The vision of the Kunming-Montreal Global Biodiversity Framework is "a world of living in harmony with nature where: 'By 2050, biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people." Environment Programme, 2022, p. 7). In working towards this vision through the 23 targets set out by the agreement, the framework issue specifically highlights the intergenerational equity:

"The implementation of the framework should be guided by the principle of intergenerational equity which aims to meet the needs of the present without compromising the ability of future generations to meet their own needs and to ensure meaningful participation of younger generations in decision making processes at all levels." (UN Environment Programme, 2022, p. 6)



As highlighted in this statement. listening to younger generations is a critical guiding principle. Numerous studies show how younger generations have more sustainable behaviors than older generations do. According to Deloitte (2022), 59% of Generation Z consumers reduced how much they buy, and 34% stopped purchasing certain brands or because of sustainability-related products concerns. Young people are already taking leadership in driving change, and YEIP seeks to contribute to this as a group of young professionals.

Therefore, YEIP:

- Praises the inclusion of the statement on "participation in decision making by youth and Indigenous peoples" and intergenerational equity as a key principle for implementation. We believe that this is a significant statement that must be a guiding principle for devising any policies deriving from this framework;
- Generally endorses the vision and the targets set out by the Conference of Parties, including the effort to protect 30% of the ecosystems (e.g., land and water).

On the future government policies for achieving the targets agreed upon at COP-15

The declaration states that "the framework is built around a theory of change which recognizes that urgent policy action is required globally, regionally and nationally to achieve sustainable development" (UNEP, 2022, p. 7). This indicates that the framework will result in urgent policy actions by Canada, which is a signatory to this framework. However, how these policies will be devised in Canada, and through what mechanisms our industry's perspective and the voice of young people will be considered in the process remains unclear.

Therefore, YEIP:

- Voices concern about the subsequent policies that will be devised based on this framework. We urge policy-makers to find win-win solutions, where the vision set out by the framework can be achieved without compromising the important role energy infrastructure development plays towards a sustainable energy future;
- Urges policy-makers to engage and listen to the energy infrastructure industry and its young professionals before devising the national and sub-national policies frameworks for achieving the targets of the Kunming-Montreal Biodiversity Framework.

On the role of energy infrastructure industry

The energy infrastructure industry has made significant strides in implementing biodiversity practices to minimize its impact on ecosystems. For instance, environmental impact assessments conducted energy are in infrastructure construction projects to identify sensitive areas and develop mitigation plans. These plans often include measures such as habitat restoration. re-vegetation, establishing buffer zones to protect critical habitats and species. Additionally, advanced technologies and techniques are employed to minimize soil erosion, prevent sediment runoff into water bodies, and maintain water quality during construction. Companies are increasingly incorporating wildlife monitoring programs and developing strategies to avoid or minimize disruptions to migratory corridors and nesting sites. They also engage in stakeholder consultations to gather local knowledge and ensure that the concerns of Indigenous communities and other stakeholders addressed during development, construction, operations activities. These efforts demonstrate the energy infrastructure industry's commitment integrating biodiversity to considerations and implementing sustainable practices to safeguard ecosystems meeting energy needs.

However, there is opportunity to go further. As our members Ryan and Saharsh highlight in <u>Episode 02 of YEIP Listens podcast</u>: "our [energy infrastructure] industry has an opportunity to become a positive contributor to the biodiversity conservation efforts by evolving our mindset from 'leaving the place as we found it' to 'leaving the place better than when we found it'".

Therefore, YEIP:

- Believes that energy infrastructure development and protecting biodiversity can be mutually synergistic goals;
- Praises the Canadian energy infrastructure industry for making significant advancement over the years in practices for minimizing impact on biodiversity;
- At the same time, also believes that more can be done by the industry;
- Encourages energy infrastructure developers to bring a paradigm shift in their thinking. Energy infrastructure development can become a net-positive activity for ecosystems, beyond simply remediating the impact from development;
 - As a simple example, energy infrastructure developers can plant double the trees than the number of trees that were cut down for construction activities.

- → Historically, the benefit of energy infrastructure development largely associated with enhancement of financial and social capital. It generates economic benefits for the communities, and with the financial capital, social capital is enhanced through building hospitals, schools, energy etc. lf infrastructure development comes with not just restoration of what it destroys during construction but with enhancement of natural capital, it could become a 'positive force' for conservation of biodiversity.
- Encourages the industry to partner with Indigenous communities that they already work with, who are leaders in this space, to co-develop strategies for achieving this;
- Urges governments and policymakers to listen to and partner with the energy infrastructure industry, so that energy infrastructure development and biodiversity conservation can co-exist as mutually synergistic goals, rather than devising and implementing policies that will hinder one or the other;
- Urges governments and policymakers to abide by the principle of intergenerational equity and involve young energy infrastructure professionals in devising the policies for implementation of the Kunming-Montreal Global Biodiversity Framework.



6. YEIP Perspective: Sustainable Jobs Plan

Background

In recognition that transition to a low-carbon world is taking place, the issue of how to make sure that this transition is equitable and just for all people has become a highly debated topic. Accordingly, the Government of Canada (2023) has released a discussion paper under the topics of "Just Transition" and sought public Government of Canada input. Recently, launched the interim action plan to work towards completing the development of The Sustainable Jobs Action Plan by 2025.

YEIP believes that the uncertainty surrounding energy transition poses a profound young impact energy infrastructure professionals, who have 30+ years of career left to navigate in the energy industry: Which career path should they choose? What if the career they choose within the sector is impacted by the transition?

Therefore, regardless of the partisan debate, the concept of just transition and sustainable jobs plan must consider young professionals and identify them as critical stakeholders. However, there is significant underrepresentation of young professionals (particularly those who are already in or just entering the workforce) in these discussions, and the recent report's action plan limits the scope of its discussion to resolving employment barriers and promoting summer jobs for young people.

listening Based on our activities conducted throughout the first half of 2023, particularly on our student and New Grad members, we establish our perspectives on how governments, educational institutions, and industry companies can help young professionals navigate the transition.



Our perspective

On how governments can help young professionals navigate energy transition

Governments design the playing field of the Canadian energy industry, and as outlined in the *Interim Sustainable Jobs Plan 2023-2025*, they have the power to deploy hundreds of billions of dollars into investments that would lead to the creation of sustainable jobs (Government of Canada, 2023). This means that governments are in a unique position to create opportunities for young people to pursue long-term and sustainable careers in the energy industry.

To do this, it is critical that the perspectives of the young people are listened to **before** these policies, programs, and investment initiatives are designed, to understand what it is that they need or want to be able to successfully navigate a long-term career in the industry. However, the recently published *Interim Sustainable Jobs Plan 2023-2025* shows lack of evidence on the inclusion or consideration of the young professionals' perspective in designing the action plan.

Therefore, YEIP encourages governments to:

- Include young professionals and consult them before any policies and initiatives, related to equitable and just transition, are devised. For example, young professionals should have formal representation at Regional Energy and Resource Tables (Regional Tables) of Sustainable Jobs Plan;
- Create a stable pathway towards a low carbon future that can sustain even with changes of political parties. Having to change career paths every time there is a change in government jeopardizes long-term careers of young professionals;
- Expand government youth councils and ensure that young energy infrastructure professionals are represented in these councils, so that young people have a say in shaping their future.

On how educational institutions can help young professionals navigate energy transition

Through the development and application of curriculum and learning methods and cultivation of innovation through research, educational institutions play a critical role in our society by "preparing future professionals [...] to tackle local, national, regional, and global challenges." (United Nations, 2022, 2-3). In Canada, the energy industry depends on educational institutions to prepare young professionals, with relevant knowledge and fundamental values to tackle the challenges of the industry. Hence, their curriculum and campus environment can have a great influence on young professionals' ability to face the ever-evolving challenges of the industry while pursuing a successful career.

As young professionals, particularly in the infrastructure segment of the energy industry. who have been educated educational institutions and are already working in the industry (including via internships), YEIP sees opportunities for educational institutions to enhance their curriculum and campus environment to better prepare the future generation of workforce to navigate the evolving energy industry and pursue a long-term career.

Therefore, YEIP encourages educational institutions to:

- Promote multidisciplinary curriculum design (e.g., gas engineering + electrical power engineering), in recognition that the future requires multidisciplinary collaboration;
- Incorporate topics related to sustainable development and energy transition (e.g., sustainable engineering design practice, sustainable finance, etc.) into mandatory courses in the curriculum;
- Proactively update the curriculum to prepare young professionals for the everevolving energy industry;

- Support creation of more youth-based associations across Canadian educational institutions focused on energy to provide them with platforms to exchange ideas and promote their perspectives;
- Host competitions (like hackathons) for emerging energy problems. Start the conversation about the biggest challenges that the energy industry is facing in terms of energy transition and encourage young minds to work together on solutions while gaining real-life exposure to the industry;
- Increase collaboration with industry companies, particularly through research projects and industry capstone projects related to energy transition that students can participate in, so that young people are provided with the opportunities to tackle tangible real-life problems and gain necessary skillset to navigate the transition.

On how industry companies can help young professionals navigate energy transition

Among our member base, which constitutes individuals who identify as young energy infrastructure professionals, а significant majority (~80%) is currently employed by private-sector industry companies. Hence, the role of industry companies in helping young professionals navigate energy transition is particularly important. Industry companies can do this by providing the young professionals with the right opportunities to acquire the knowledge that will be relevant in the future, develop new solutions rather than applying existing solutions, and participate in companies' strategic decisionmaking today, which will have long-term implications on the companies' directions and, consequently, young professionals' careers.

Therefore, YEIP encourages industry companies to:

- Ensure that the emerging low carbon energy infrastructure opportunities (e.g., pipeline readiness for hydrogen economy, smart grid, renewables integration, RNG, CCUS development, etc.) are directly provided to young professionals, so that they can acquire the knowledge in these emerging areas, become experts, and build long term careers into the future;
- Enhance the New Grad Programs (including EIT programs) to (1) focus on broad transferrable skills, rather than narrowlyfocused skills that face risk of obsolescence, and (2) provide young professionals with exposure to a wide range of areas within the organization, so that young professionals are empowered for broader career choices;
- Introduce a 'Young Professionals Advisory Committee' in companies' strategic decisionmaking process, so that young people have a say in shaping their future;
- Bring greater transparency to what the skill gaps are in the company's transition towards a low carbon future, so that young professionals can develop and fill those gaps;
- Provide opportunities for young professionals to participate in educational programs to stay current with emerging technologies, policies, and strategies, so that they can be empowered to navigate a longterm career in the evolving industry landscape.

7. Conclusion

Overall, through the two-pillared strategy of listening & disseminating, YEIP has established its perspective on some of the most critical topics that will have an impact on our industry and consequently our long-term career in the industry. As a result, this also introduced three important paradigm-shifts in the current industry thinking:

- Sustainable energy future: Shift from individual asset-based (e.g., pipeline, solar farm, power plant, etc.) thinking to a systemic infrastructure-based thinking;
- Biodiversity & energy infrastructure: Shift from thinking of energy infrastructure development as a 'net negative' activity for biodiversity to thinking of it as a 'net positive' activity that can co-exist and create synergies with biodiversity:
- Sustainable jobs plan: Shift from underconsideration of young people to recognition of young people as a critical stakeholder group in the context of equitable and inclusive energy transition.

By bringing these three paradigm-shifts and framing the conversation around these three areas, we believe that the Canadian energy

infrastructure industry will become recognized as a critical solution provider for our society and a positive force, rather than an obstacle, for addressing the greatest sustainability challenges of our time, including climate change and biodiversity conservation. This will inevitably make the industry an attractive place for young people to work in and build long-term and purposeful careers.

Looking Forward

This embarks the first full cycle of listening and dissemination efforts for YEIP. As our society and industry navigate through the complex pathway towards a sustainable future, we firmly believe that young professionals, as the very people who will be living in that future, hold the key to accelerating this advancement.

Therefore, YEIP will continue to listen to the young professionals, learn from them, and drive positive changes in our industry to shape a sustainable future.



8. Acknowledgements

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... and many other members who have anonymously participated in the listening process

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