

May 5, 2025

Net-Zero Challenge: Environment and Climate Change Canada

## Attn.: John Moffet, Assistant Deputy Minister – Environmental Protection Branch (ECCC)

Dear John:

## Re: MEMO – Climate Related Financial Disclosures

This memorandum explains how NAEL (NORR Architecture and Engineering, Limited) complies with the Net-Zero Challenge's requirement to provide climate-related financial disclosures based upon the below listed TCFD recommendations (NAEL's responses are in blue):

Governance: disclose the organization's governance around climate-related risks/opportunities:

- Describe the board's oversight of climate-related risks and opportunities. During Q4/2024-Q1/2025 and via internal workshops, NAEL's Board conducted Business Impact Assessments (BIAs) for 5 business functions (and potential disruptions) totaling 16 internal/external processes, calculated the Maximum Tolerable Outage (MTO), identified critical business processes/interdependencies, and identified critical operational dependencies which allow recovery priorities to be determined. The goal of this process was to understand the number of business processes/functions, capture data to influence business decisions and create a more pragmatic, sustainable program for future business decisions/recovery strategies to guide Board-level decision making (short-, medium- and long-term).
- Describe management's role in assessing and managing climate-related risks and opportunities. The 5 primary functions assessed included Operations, Finance, Human Resources (HR), Legal and Design Technologies (DT). Workshops were done in conjunction with the Board and Directors of each of these respective departments across the whole of the business – both for internal and external tasks. Each Director identified a list of business processes and potential disruptions, valuated their MTO per process and assigned a time-based criticality level to each process: Level 1 of 0-72-hours; Level 2 of 3-10 days; Level 3 at >10-days. Color coded visualizations accompany each line item for ease of interpretation and use. It was discovered that 6 processes could result in Financial Loss impact, 3 processes could result in Core Services being impacted, 1 process could result in Legal/Regulatory impacts, 8 processes could result in Operational impacts, and 1 process could result in a Reputation impact.

<u>Strategy:</u> disclose the actual and potential impacts of climate-related risks and opportunities on the organization's business, strategy, and financial planning:

 Describe short, medium and long-term climate-related risks/opportunities to the organization. Based upon the discoveries from the process outlined above, NAEL determined the number – and time-based disruption potential – of process' impacts, including the identification of upstream dependencies for further collaboration around shared issues – particularly identifying potential Single Points of Failures (SPOF) across our supply chain for buildings, equipment, technology, workforce, suppliers and for vital records. <u>Short-term impacts</u> include power outages, access to secure spaces/site-based equipment to conduct services, and access to cloud-based assets – operations and project delivery – in case of network failure. <u>Medium -term impacts</u> include impacts from natural disasters and/or injury to people/damage to equipment in the variety of locations where we operate



- both in office and in the field. These include flooding, drought, fire/smoke, seismic, tornado, extreme hot/cold temperatures, extreme precipitation/snowfall, avalanche and impacts of increased wind. **Long-term impacts** include challenges working transnationally, access to services' delivery due to security clearance requirements, and potential for litigation (operationally and in project delivery).

• Describe climate-related risks/opportunities impacting the organization's businesses, strategy, and financial planning.

In Canada, NORR operates physical office locations in Toronto, Ottawa, Calgary and Edmonton, plus hosts a team (Subsidiary company, "Cion") of remote workers who conduct onsite engineering-based services across the whole of Canadian provinces/territories. The team reviewed the following list of potential climate-related risks to operations, as well as opportunities.

Disaster/Disruption	Risk	Opportunity
Earthquake/sinkholes	Loss of equipment/life	CA Offices located in "Low" Hazard Zones, except "Ottawa" (High)
Tsunami	Loss of equipment/life	CA Offices not directly located within coastal areas (Atlantic/Pacific)
Volcano	Loss of equipment/life	CA Offices not directly located within volcanic activity risk zones
Landslide/avalanche	Loss of equipment/life	CA Offices located n dense urban centers away from acclivities
Flood	Loss of equipment/life	CA Offices adjacent to riverine/lake environments, above grade.
Hurricane	Loss of equipment/life	CA Offices located in "Low" Hazard Zones
Tornado	Loss of equipment/life	CA Offices located in "Low Hazard Zones
Wildfire	Loss of equipment/life	CA Offices located in "Moderate (ON) and "High" (AB) Hazard Zones
Drought	Loss of equipment/life	CA Offices in Low" Hazard Zone
Heat Wave	Loss of equipment/life	CA offices are located within urban centers and are subject to increased intensity of the urban heat island effect, relative to adjacent natural ambient temperatures.
Blizzard / extreme cold	Loss of equipment/life	CA Offices are subject to these conditions
Hail, thunder & lightning	Loss of equipment/life	CA Offices in "Low" Hazard Zone, except AB (High)
Civil Unrest	Loss of equipment/life	CA Offices are located within dense, urban centers

In all cases, NORR's cloud-based business model and hybrid work environment allow flexibility for staff to avoid risk to life/equipment, and if risks are incurred, there are backup systems for redundancy and continuation of business functions built into our systems in most instances. Our financial planning includes continuation of the hybridization of work, transition towards secure, cloud-based resources, and downsizing the number/size of physical assets/spaces that we own and/or operate – minimizing our associated risks through sharing of risk with external, specialized partners, as well as through providing a locus of control and accountability to staff, directly.

 Describe the organization's resiliency strategy, considering different climate-related scenarios, including a 2°C or lower scenario.

Disaster/Disruption	2-degrees, or lower scenario	
Earthquake/sinkholes	Not impacted	
Tsunami	Not impacted	
Volcano	Not impacted	
Landslide/avalanche	Access to transportation routes may be affected – affects field work, only	
Flood	Increased risk, particularly to Calgary location, as well as access – field workers	
Hurricane	Ottawa could be impacted by increased wind speeds (associated power outages)	

All "risks" mentioned above will be affected in the following ways



Tornado	All locations would see an increase in tornado activity in a warming scenario	
Wildfire	All locations would be impacted by increased wildfire frequency/poor air quality	
Drought	Not impacted	
Heat Wave	All locations would be impacted by increased heat stress/poor air quality	
Blizzard / extreme cold	Temperatures increasing gradually over time would reduce these impacts	
Hail, thunder & lightning	Increased risks over time to all locations, particularly AB-based offices	
Civil Unrest	Increased impact over time, particularly in urban centers (access to them and field work)	

Again, our strategy for future climate scenarios is wrapped into our cloud-based, hybridized work strategy. For the areas impacted by future climate scenarios: 1) landslides, avalanches, flooding, hailstorms and lighting strike risks are mitigated through less physical equipment, space and by granting agency of staff to work from home/not go onsite during poor conditions or during times when access is limited, restricted and/or poses risk. 2) Increased wind will be a factor, from tornadoes/hurricanes, as well as civil unrest, will primarily affect our physical locations and access to them. Our strategy should be to address these issues with landlords when we enter leases, particularly around physical security to buildings, leased spaces and public realm spaces around buildings – and to adjacent emergency infrastructure connectivity. 3) increased heat, wildfire frequency, and consequential poor indoor/outdoor air quality is a factor that will impact all locations, even those working remotely. Again, staff may choose to relocate to safer areas, if possible/able, during these times to avoid the negative impacts of these events, as well as to equip homes with additional mitigation strategies (i.e. air filtration media).

## **<u>Risk Management</u>**: disclose how the organization identifies, assesses, and manages climate-related risks:

- Describe the organization's processes for identifying/assessing climate-related risks.
- Describe the organization's processes for managing climate-related risks.
- Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.

The organization pulled together a diverse team from across interdisciplinary leadership within the company to address each risk, issue by issue. These were supplemented with discussions and interactive mapping exercises to understand the current and future risks' implications, relative to our Canadian office locations. A chain of command for roles/responsibilities, regarding communication and redundancy, was established within this group to foster communication and proactive engagement around the potential for disruptions to business operations. These plans are integrated into the overall risk management policy and meetings are a part of informing the C-Suites' decision-making processes, affecting leases, HR, procurement, etc. – all departments and associated processes included within this collaborative, interdisciplinary team.

<u>Metrics & Targets:</u> disclose metrics and targets used to assess/manage relevant climate-related risks and opportunities:

- Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- Disclose Scope 1, 2 and 3 greenhouse gas (GHG) emissions and related risks.
- Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.

NORR actively tracks governmental agency's website to assess current, near, and long-term risks' evolution, over time. These visualizations help assess what changes need to be made, and when, so



that we can evolve our business continuity within an evolving climate over time. Our Scope emissions are viewable online at the following link <u>Energy & Carbon - NORR | Architecture, Engineering, Planning and Interior Design</u> where we continually track and update these figures on an annual basis. Our current targets involve GHG reduction, as we're targeting net-zero emissions by 2050, globally. By tracking, reporting and actively engaging with our footprint, we believe we can also mitigate risks – even taking advantage of some positive aspects of a changing climate (i.e. less cooling degree days) to support our progression towards net-zero emissions (factoring in potential for offsets, over time).

We hope this satisfies our climate related financial disclosures requirement for compliance with the Canadian Net-zero Challenge's scorecards – explaining how we are actively engaged with this important business element across our company, while needing to maintain confidentiality around the hard data, accordingly.

Sincerely,

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Blake Jackson Director, Sustainability T 313 324 3164 M 706 280 3957 | <u>blake.jackson@norr.com</u> Date: 07 July, 2023