

A leading partner in a  
smart energy future



2021-2025  
Strategic Direction

## Our Mission

To create long-term value for our shareholder, benefitting our customers and the communities we serve

## Our Vision

Hydro Ottawa – a leading partner in a smart energy future

## Our Organizational Values

Teamwork, Integrity, Excellence, Service

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# 1. Overview of Strategic Direction

## 1.1 INTRODUCTION

**This 2021–2025 Strategic Direction provides an overview of Hydro Ottawa’s business strategy and financial projections for the next five years. It is designed to inform our shareholder and all other stakeholders about the most important trends shaping our business environment, and how the company intends to respond to them.**

This refreshed strategy builds upon the strong record of success from our recent strategic planning cycles. Signature milestones have included increasing our renewable energy portfolio by over 500 percent since 2012, achieving industry-leading performance in the reliability of our local grid, and growing our energy and utility service offerings as a core area of business. In addition, a relentless focus on putting the customer at the centre of everything we do has elevated customer service to new levels of excellence.

Alongside these accomplishments, we have never lost sight of our responsibility to support the well-being of our community. Indeed, over the 2016–2020 period, our dedication to the community was on display like never before. During this time, the lives of our customers and stakeholders were profoundly impacted by a wave of unprecedented events, ranging from floods to tornadoes to the global COVID-19 pandemic. In the midst of each of these disruptions, Hydro Ottawa rose to the occasion and ensured peace of mind for our community by maintaining a safe and reliable supply of electricity.

A hallmark of our evolution as a company has been a commitment to sustainability and Environmental, Social, and Governance (ESG) performance in our growth, operations, and business practices. This strategy has yielded significant benefits, including stable financial returns for our shareholder, the City of Ottawa; enhanced value across the customer experience; a higher quality of life for our community; and a safe, secure, and healthy work environment for our employees.

This commitment to sustainable business operations has served Hydro Ottawa and our stakeholders very well. More importantly, it is exactly what is needed to address the greatest challenge of the present and the future – climate change. We have witnessed firsthand, in our own backyard, the devastating impacts of the growing frequency of severe weather. With the pattern of such events increasingly the norm worldwide, a consensus is emerging in international financial markets that action to combat climate change has become a business and investment imperative.

We are therefore anchoring this 2021–2025 Strategic Direction in bold, decisive action aimed at doing our part to address the climate change challenge. The focal point of our corporate strategy over the next five years (and beyond) will be achieving net zero operations by 2030. Hydro Ottawa will become the first municipally-owned utility in Canada to reach this critical milestone, and we will harness every ounce of innovation and ingenuity that we have to get there.

We look forward to this next exciting chapter and to the opportunities ahead for creating greater value for our shareholder and community.

## 1.2 STRATEGY

This 2021–2025 Strategic Direction represents both a continuation and an expansion of the robust foundation that Hydro Ottawa has built in our strategic planning framework. In light of our success in recent years, together with the trajectory of the company’s business and policy environments, we are renewing – rather than replacing – the planning framework for our activity and operations.

First and foremost, our core mission and mandate remain the same – we will continue to create value for our shareholder, our customers, and our community through excellence in the delivery of electricity and related services.

Likewise, we are re-affirming our vision of being a leading partner in a smart energy future. At the same time, however, we are bringing this vision into sharper focus, by identifying “net zero” as a critical characteristic of the future we wish to reach.

Moreover, our core business lines remain unchanged. While we will continue to pursue new opportunities to expand and diversify revenue streams, our activity will be rooted in the areas of electricity distribution, renewable energy generation, and energy and utility services.

Alongside this continuity, we are placing a new emphasis on how sustainability is integrated into all of our business practices. For more than a decade, Hydro Ottawa has been on a journey of balancing growth with environmental protection and social responsibility. Our 2021–2025 plan presents a timely opportunity to reinforce this commitment in a more visible manner.

Our new emphasis is two-fold. First, we are refreshing our approach to how we organize our planning and operations through our Four Key Areas of Focus: Customer Value, Financial Strength, Organizational Effectiveness, and Corporate Citizenship. These areas of performance will be retained, with the most important driver of our strategy remaining Customer Value. However, we are now highlighting how sustainability underpins all of our business activity across these categories of performance.

Secondly, as noted above, we are committing to achieving net zero operations, with 2030 as our targeted timeframe. This overarching objective is consistent with our obligations to help build a vibrant and sustainable national capital, combat climate change, and manage our business responsibly. Through this whole-of-company effort, we will pursue every opportunity - big or small - to improve our sustainability profile.

With respect to the business, operating, and political environments in which we carry out our activity, they have all shifted significantly. Five key change drivers - what we call the “5 Ds” - now define our strategic context: decarbonization; digitization; decentralization; diversification; and demographics. Collectively, and in varying measure, these drivers are shaping the landscape within which we will seek out opportunity and measure our performance, while mitigating risk.

As we cast our glance forward over this five-year horizon, we are excited by the possibilities that await. At the same time, we acknowledge that numerous aspects of our business environment highlight a need for a prudent and disciplined approach to pursuing opportunities, and we plan to calibrate our approach accordingly.

Hydro Ottawa has been around for more than 100 years and has a history of evolving to meet our City’s and our customers’ ever-changing energy needs. And now we must transform again - in perhaps the most far-reaching way we ever have. Our company is ready, willing, and able to rise to this challenge.



# Our 8-Point Strategy



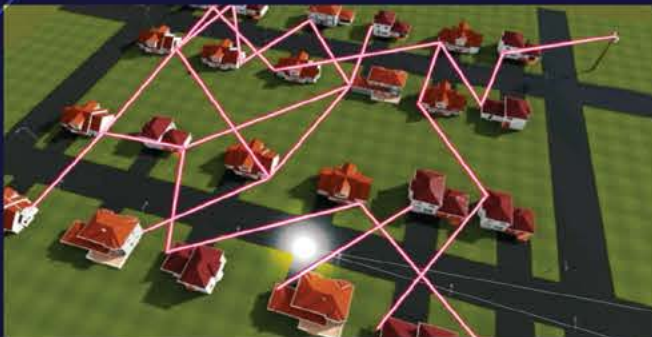
1. Achieve net zero operations by 2030



2. Become the partner of first choice for signature green energy and carbon reduction projects in our community



3. Accelerate digital transformation to enable sustainable business practices



4. Leverage and promote distributed energy resources

5. Continue to grow and diversify our revenue sources



6. Grow our social license to operate



7. Ensure organizational capacity, culture, and leadership to deliver in a post-pandemic environment



8. Continue to provide best-in-class customer service







# 2. Our Business

Hydro Ottawa Holding Inc. (Hydro Ottawa) is 100 percent owned by the City of Ottawa. We are a private company, registered under Ontario's *Business Corporations Act*, and overseen by an independent Board of Directors consisting of 11 members appointed by City Council.

Hydro Ottawa owns and operates three primary subsidiary companies, around which our core businesses are organized: electricity distribution, renewable energy generation, and energy and utility services. With the Corporation continuing to grow and diversify our business, other operating companies may be created over the course of this Strategic Direction.

## **Hydro Ottawa Limited**

Hydro Ottawa Limited is a regulated electricity distribution company operating in the City of Ottawa and the Village of Casselman. As the third-largest municipally-owned electrical utility in Ontario, Hydro Ottawa Limited maintains one of the safest, most reliable, and cost-effective electricity distribution systems in the province, serving approximately 354,000 residential and commercial customers across a service area of 1,100 square kilometres.

## **Energy Ottawa Inc. (Portage Power)**

Energy Ottawa Inc. operates under the brand Portage Power and is the largest municipally-owned producer of green power in Ontario. It owns and operates six run-of-the-river hydroelectric generation plants at Chaudière Falls in Ottawa's core, along with the historic Ottawa River Ring Dam. In addition, its hydroelectric fleet includes 10 other run-of-the-river facilities in Ontario and New York. Portage Power also holds majority interests

in two landfill gas-to-energy joint ventures that convert methane gas into renewable energy at the Trail Road and Laflèche landfill sites in Ottawa and Moose Creek, Ontario. Rounding out its green energy portfolio are 16 solar installations located across the City of Ottawa. In total, the company has over 128 megawatts of installed green generation capacity – enough to power approximately 107,000 homes.

## **Envari Holding Inc. (Envari)**

Envari offers large-scale sustainable energy solutions for municipalities, industrial and commercial clients, and utilities. It manages large energy transformation projects on behalf of its clients, offers a portfolio of energy efficient and environmentally friendly products and services, and provides operations and maintenance capabilities to its customers. The company provides extensive energy services to the City of Ottawa, while also serving a diverse and expanding client base.

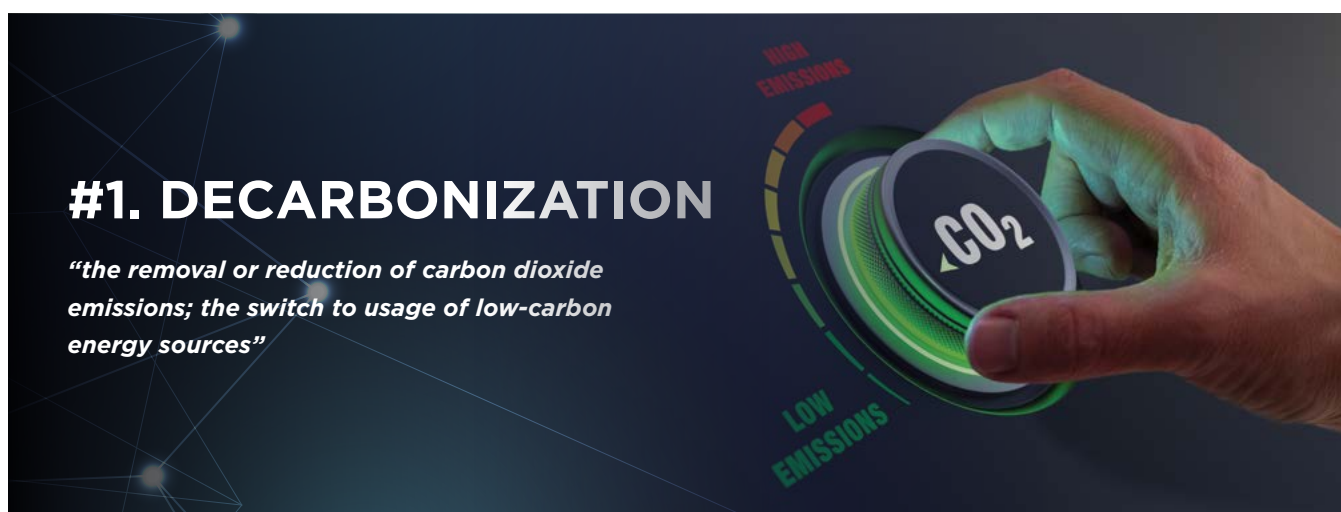


# 3. Strategic Context

Hydro Ottawa has formulated our 2021–2025 strategy and financial outlook against the backdrop of numerous trends and shifts in our operational, business, and policy environments. Collectively, we refer to these key change drivers as the “5 Ds” – decarbonization, digitization, decentralization, diversification, and demographics.

Each of these factors presents both risks and opportunities, which Hydro Ottawa must successfully navigate as we pursue the vision of being a leading partner in a smart energy future.

## 3.1 THE “5 Ds”



### Climate Change

Our previous five-year strategy followed on the heels of the United Nations Paris Agreement on climate change in 2015. Since that time, the calls from countless governments, scientists, and civil society stakeholders for urgent action to reduce greenhouse gas (GHG) emissions have amplified significantly.

Many of the jurisdictions in which Hydro Ottawa operates are demonstrating leadership on this front. In 2019, the City of Ottawa declared a climate change emergency and later finalized its “Energy Evolution” strategy aimed at boosting the use of local renewables and lowering city-wide emissions by 100 percent by 2050. Across Canada, carbon pricing is now an established cost of everyday living, and will play a key part in the federal government’s plans for building a net-zero electricity grid by 2035 and a net-zero economy by

2050. The economy-wide net zero by 2050 target has likewise been codified in New York State, where Hydro Ottawa operates four run-of-the-river hydropower plants.

Emissions reduction is one side of the climate change coin, with the other being adaptation. Hydro Ottawa is no stranger to the push for enhanced measures to adapt to the effects of climate change, having experienced firsthand the adverse effects from the growing frequency of severe weather. From 2017 to 2019, the company was impacted by a 1-in-100-year flood, a 1-in-1000-year flood, six tornadoes, and an array of ice and wind storms. The National Capital Region suffered economic losses in the hundreds of millions of dollars as a result of these events.

Whether from the emissions mitigation or adaptation angle, climate change is one of the biggest challenges –

if not *the* greatest – facing our planet. By committing to achieving net zero operations by 2030, Hydro Ottawa is striving to take action that measures up to the magnitude and urgency of the challenge at hand.

### **Environmental, Social, and Governance Reporting**

Advocacy by government bodies across the world to tackle climate change is not a new phenomenon. What is new, however, is the intensifying push within the international investment and financial community for corporations to address the risks associated with climate change.

In recent years, more investors have sought to integrate climate-related considerations into their investment analysis and decision-making. In turn, disclosures of climate risks are increasingly informing assessments of a company's performance and long-term value.

In addition to climate disclosures, financial markets have also signalled a growing appetite for information related to companies' practices around social issues and corporate governance (e.g. workplace culture, supply chain management, Board diversity, and executive compensation). This movement for increased disclosure of non-financial performance indicators – or what are generally referred to as ESG factors – continues to evolve, with expectations for reporting extending to all for-profit corporations. Many in the private sector are embracing the elevated profile of ESG, arguing that effectively addressing these issues can yield a range of benefits in relation to environmental sustainability, risk management, corporate resilience, cost savings, increased revenue, employee engagement, reputational value, and customer loyalty.

### **“Greening” Global Energy Investment**

In step with the ESG movement, financial markets are also re-shuffling their priorities for energy investments. With climate change risk viewed as investment risk, the cost of new renewable projects dipping below those of conventional power plants in many parts of the world, and institutional investors facing pressure over their fossil fuel holdings, the capitalization of clean energy is flourishing. According to the International Energy Agency, renewables represented 90 percent of new

power generating capacity installed in 2020. Similarly, Goldman Sachs projected that 2021 would mark the first year in which global spending on renewable power would eclipse that of oil and gas exploration.

This trend bodes favourably and will open new doors for renewable energy providers like Hydro Ottawa who have established themselves as champions of the transition to a cleaner, smarter energy future.

### **Increased Electrification of the Economy**

The trajectory of climate change policy and private sector investment is moving firmly in the direction of greater electrification across economic sectors, especially transportation, to help lower their emissions profile.

The examples are numerous and continue to multiply. Here in Ottawa, a signature public infrastructure and environmental initiative has been the construction of electrified Light Rail Transit. In its latest long-term outlook for Ontario's electricity grid, the Independent Electricity System Operator (IESO) estimated that the system demand associated with transportation electrification in the province will grow annually by 20 percent through 2040. The federal government, meanwhile, is aiming for 100 percent of light-duty vehicles sold by 2035 to be zero-emitting. Events on the domestic stage mirror developments at the international level, where a critical mass of major economies are engaged in such efforts as incentivizing the manufacture of electric and hybrid vehicles, and promoting greater use of clean electricity in heating and industrial applications.

The continued substitution of non-emitting electricity for fossil fuels will play a critical role in helping Canada to achieve its economy-wide target of net zero emissions by 2050. In fact, Electricity Alliance Canada anticipates that this shift will entail a doubling or tripling of current levels of electric power demand. Under such a massive power system expansion scenario, electricity providers will assume a bigger role in the economy and society. This will present both a need and an opportunity for investments in new infrastructure and value-added services, while further positioning utilities to serve as trusted advisors for customers and enablers of smart energy solutions.



## #2. DIGITIZATION

*“the conversion of information and processes from analog to digital form”*

### **The Fourth Industrial Revolution**

According to the World Economic Forum, the 21<sup>st</sup> century is in the throes of a Fourth Industrial Revolution. This revolution is characterized by the exponential growth and connectivity of electronics and information technology (IT). Entire industries and systems of production are being transformed by a seemingly continuous cycle of technological breakthroughs in such domains as the Internet of Things (IoT) and artificial intelligence (AI).

Within this landscape, the operational and IT systems that underpin utilities’ activities are rapidly evolving. The systems and processes supporting frontline operations and back-office functions are steadily migrating towards digital, mobile-friendly, and cloud-based solutions. Core operational systems continue their convergence with enterprise information systems. Automation is on the rise and is being heralded as having incredible potential to accelerate the transition to a fully autonomous and intelligent electric grid.

Taken together, these trends present a wide spectrum of opportunity for Hydro Ottawa. This includes introducing new service offerings made possible by advanced data analytics, deploying sophisticated tools which can minimize the duration of outages, and accelerating the integration of more distributed forms of energy.

### **Cyber Security**

While the benefits of technological progress are indisputable, the digitization of much of modern life is not without risk. The proliferation of digital platforms and devices presents a wider attack surface in cyberspace for malicious actors. In recent years, the number of ransomware attacks on critical infrastructure – pipelines, hospitals, government agencies, telecommunications providers – has increased by orders of magnitude. In light of the essential function they perform, utilities rank among the most high-value targets. The risk is magnified for an electricity distributor like Hydro Ottawa, which serves the capital city of a G7 country and large customers with unique service quality and data confidentiality needs.

In view of such potential vulnerabilities, the expectations of public sector agencies have amplified with regards to the steps that owners and operators of critical infrastructure must undertake to safeguard their assets. For example, the Ontario Energy Board (OEB) recently implemented a cyber security risk management and reporting framework for utilities under its jurisdiction, while the IESO’s mandate was expanded to provide cyber security information services to licensed transmitters and distributors.

Over the coming five-year horizon and beyond, the risks to critical infrastructure will outpace any individual organization’s capacity to address them. Among other things, this means that government and industry partnerships will assume heightened importance.



## #3. DECENTRALIZATION

*“the transition from large, centralized production and networks to smaller, more distributed production and networks”*

### Smart Grid and Distributed Energy Resources

Over the past 20 years, the implementation of Smart Grid equipment and devices has fostered a more dynamic ecosystem of transactions, participants, and flows of energy, information, and communications. Whereas the 100-year-old model of electricity was premised on a one-way flow of power with no involvement by the end-user, the Smart Grid contemplated enabling the bidirectional movement of electrons and empowering customers as active participants in the system.

In light of the capabilities and opportunities made possible by the Smart Grid, it is widely acknowledged that the electricity sector is on a steady trajectory of transformation towards a much more decentralized paradigm.

As the Smart Grid transition has unfolded, a major area of focus that has emerged is the increased deployment of distributed energy resources (DERs) on local electricity networks. The IESO defines DERs as “electricity-producing resources or controllable loads that are connected to a distribution system or connected to a host facility within the local distribution system.” DERs may include solar panels, electricity storage, electric vehicles (EVs), and controllable loads like heating, ventilation, and air conditioning systems and electric water heaters.

In recent years, Hydro Ottawa has witnessed the popularity of DERs rise substantially, with different customer segments pursuing DER solutions for

different reasons. Many customers in the MUSH sector (municipalities, universities, schools, hospitals) have installed on-site generation and storage to help offset their electricity costs and benefit from back-up supply in the event of an outage. Several community housing, commercial, and government customers are interested in sourcing power from clean forms of generation in keeping with their corporate sustainability objectives.

Greater penetration of DERs on distribution networks is made possible by Smart Grid technology. In step with the growing digitization of economic activity, future phases of DER adoption are expected to be driven by advanced AI and IoT capabilities, which will enable enhanced modernization, decarbonization, and automation of energy systems.

Numerous signals suggest that consumer and stakeholder interest in DERs will continue to grow over the short- and long-term horizon. Modelling commissioned by the City of Ottawa has identified a need for thousands of megawatts of new capacity in locally-sited, renewable distributed resources in order to achieve Energy Evolution objectives. In addition, the IESO and OEB are collaborating on several initiatives aimed at piloting innovative business models for DER projects, leveraging the benefits of DERs for system planning and operations, and enabling DERs to unlock new revenue streams in Ontario’s wholesale electricity markets.

### DERs and Aging Infrastructure

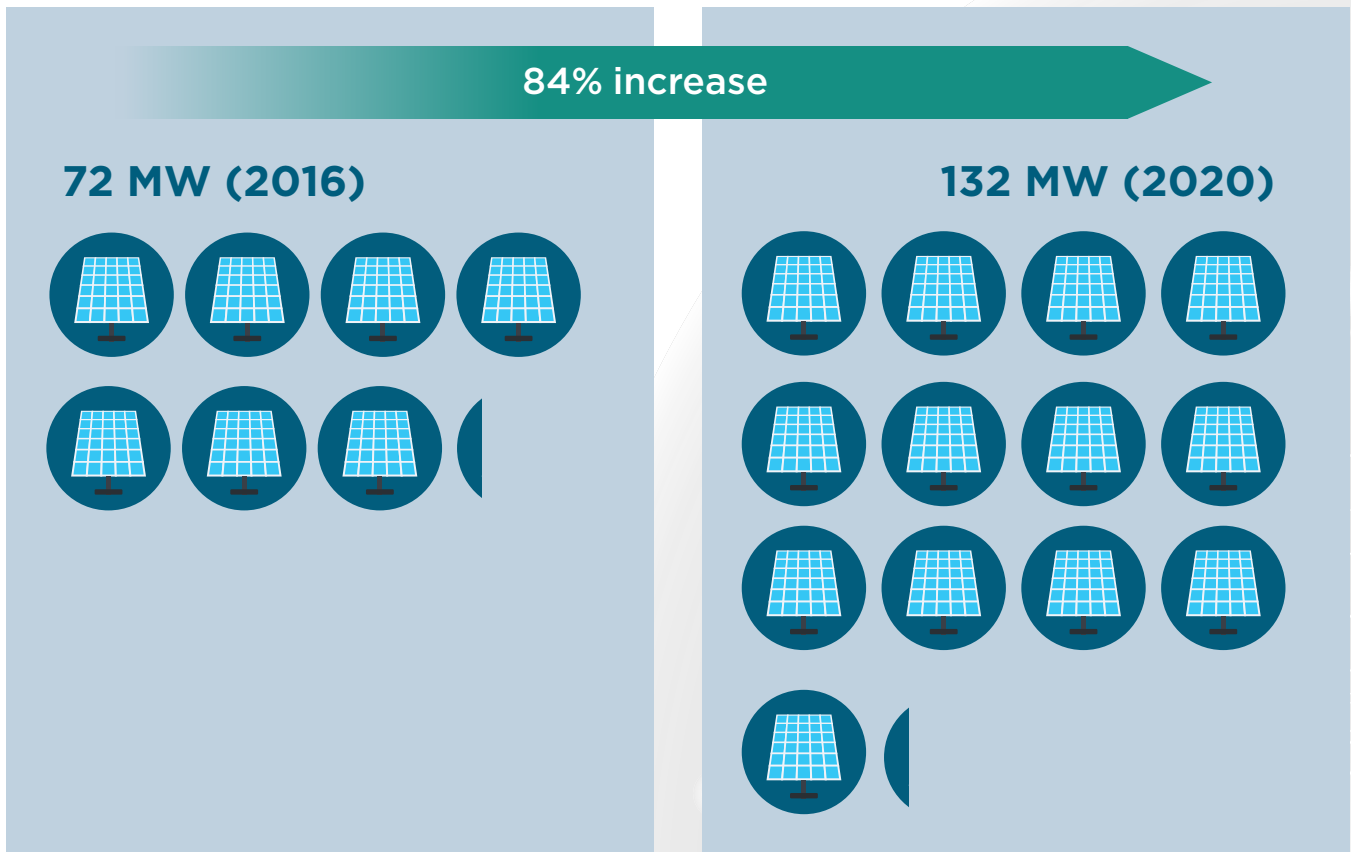
The transition to a more decentralized power system is also overlapping with a significant infrastructure renewal cycle for electric utilities. This presents opportunities for leveraging distributed energy solutions to help address the challenge of aging infrastructure.

Like many electric utilities in Canada, Hydro Ottawa is in the midst of an unprecedented period of infrastructure renewal. Large segments of our system were constructed in the 1960s through 1980s. With most assets having a lifespan of approximately 50 years, the need to replace or refurbish a considerable portion of them has spiked. As it did for 2016–2020, the company has secured OEB approval to execute a major program of investment over the course of the 2021–2025 period.

DERs offer utilities the possibility of deferring or reducing the need for certain capital investments, which in turn helps to control costs for consumers. For example, Hydro Ottawa has already begun deploying DERs as non-wire alternatives in Kanata North, where a mix of conservation, load transfer, and voltage reduction solutions has enabled the deferral of a new substation which the IESO had identified as a need. Similarly, the IESO's most recent round of regional planning for Greater Ottawa evaluated a range of DER options to meet local system needs and committed to further assessment of non-wire alternatives to help manage demand growth.

Decentralization thus represents a valuable expansion of the toolbox available for utilities to fulfill their essential responsibilities of maintaining and optimizing grid infrastructure.

## Distributed Energy Connected to Hydro Ottawa's Grid



Distributed energy resources connected to our grid include solar, hydroelectric, cogeneration, biomass, and diesel-fired generation, as well as battery storage.

## #4. DIVERSIFICATION

*“the process of enlarging a business or varying its range of assets, products, services, business lines, and operational fields”*

### Evolution of the Utility Business Model

As noted above, the rising tides of decarbonization, digitization, and decentralization present intriguing challenges and opportunities for planners and operators of the electricity system. In a similar vein, these change drivers have raised questions around fundamental aspects of the utility revenue model.

In particular, the historical assumption of customer growth equating to electricity consumption growth no longer holds true. Innovative tools, technologies, and data sets have enhanced customer control over their energy use, while also introducing options around self-supply. Moreover, advances in efficiency and conservation have enabled increased use of devices and appliances to coincide with declines in overall consumption. Together, these trends have injected risk into utilities' revenue profile.

Conversely, however, the push to decarbonize, digitize, and decentralize presents a host of opportunities. Customer demand for leading-edge solutions and analytics is growing rapidly. With direct, long-standing, and trusted relationships with individual customers, utilities are uniquely positioned to meet the evolving needs for value-added services which extend beyond the mere provision of electrons.

In many ways, Ontario is becoming a laboratory for innovative diversification in the sector. In 2015, for example, restrictions in the *Ontario Energy Board Act* relating to permissible business activities for distributors

and their affiliates were lifted. This sent a powerful signal in support of diversification, with several distributors having subsequently established new business lines in such areas as civil construction, data services, and sub-metering. In addition, as noted above, the OEB and IESO are collaborating on several initiatives to pilot new business and operational models for DERs.

To be sure, Hydro Ottawa has been a leader amongst our peers, with our successful journey of diversification stretching back well over a decade. That said, the acceleration and convergence of major change drivers in the sector mean that more players are becoming attuned to the diversification imperative, with the marketplace set to become significantly more competitive and crowded as a result.

### Consolidation and Shared Services in Ontario's Distribution Sector

Approximately 60 local distributors provide electricity to the province's 5.3 million customers. For many years, public policy has sought to encourage and incentivize consolidation within the distribution community. What's more, numerous aspects of the sector's evolution and the changing utility business model seem to favour economies of scale in a distributor's operations and activities. It is therefore not altogether surprising that the sector has witnessed a steady succession of consolidations in recent years, along with an uptick in shared services agreements.



The footprint of distributors across Eastern Ontario means that Hydro Ottawa remains well-positioned to pursue consolidation opportunities. Similarly, the company's range of experience with shared services has underscored the value of targeted partnerships with peers, where appropriate. Going forward, these options will remain important parts of the company's diversification toolkit.

### **Redesign of Ontario's Electricity Market**

Since 2016, the IESO has been exploring enhancements to the design and administration of Ontario's wholesale power markets. Several proposed reforms will be highly relevant for Hydro Ottawa, including the adoption of competitive auction mechanisms for procurement of new electricity supply, as well as expanded eligibility for new players, products, and services (including DERs) to participate in the market. Under the IESO's timelines,

initial reforms are slated to take effect in Fall 2023, just beyond the mid-point of Hydro Ottawa's 2021-2025 Strategic Direction term.

For electricity distributors and generators, the changes emanating from these reforms may represent a double-edged sword. On the one hand, they represent a shift away from the model of awarding long-term power purchase agreements to generators for new supply, which has supported much of Hydro Ottawa's recent growth in renewable capacity. On the other hand, to the extent that market redesign serves as a platform for developing new product and service offerings, as well as exploring the establishment of localized electricity markets to stimulate expansion of renewable and distributed resources, the initiative could also open the door to business and revenue opportunities.





## #5. DEMOGRAPHICS

*“the ‘people’ side of the electricity business – customers, community, employees”*

### **Evolving Customer Needs and Expectations**

A focus of this Strategic Direction, as well as our prior five-year plan, is how the changing role of the customer is fueling transformation in the electricity sector. This trend shows no signs of abating. The expectations for customized service, control, and convenience continue to expand. They cover a broad range of interests, from controlling costs to enjoying more flexible service options to participating directly in the electricity marketplace.

Importantly, expectations often vary across different segments of the customer base. For example, throughout the COVID-19 pandemic, with more customers working and learning from home, the needs of residential customers necessitated changes to the way Hydro Ottawa performs maintenance on the grid; planned power outages had to be limited to critical situations only. Meanwhile, for many commercial customers, an issue of primary concern has been flexible payment plans, which have played a vital role in assisting businesses in managing the impacts and disruptions of public health restrictions.

Furthermore, some shifts in customer behaviour mirror broader shifts in population demographics and public attitudes. More and more of our customers are comfortable with digital services and interactions, as borne out by the growing number of registrations for online accounts and e-billing. Likewise, customer

feedback signals rising support for Hydro Ottawa’s investments in green energy and focus on sustainability, consistent with opinion polls finding increased support for action on climate change.

The shifting sands of customer needs and choices present exciting opportunities for enhancing customer value and service. To realize these opportunities, electricity providers will need to continuously improve the way they do business and the services they offer. Creating a more effortless and engaging customer experience will be essential, with “easy and fast” being the standard by which success will be measured.

### **A Mixed Outlook for Our Community**

Looking ahead over the 2021–2025 horizon, the economic forecast for our community features both tailwinds and headwinds.

Grounds for optimism include expectations for the continuation of steady growth which the City of Ottawa has experienced in recent years. In renewing its 25-year plan to guide municipal development, the City has forecasted a 22 percent increase in population by 2026, relative to 2016 levels. What’s more, according to London Economics, the Ottawa region enjoyed the strongest ranking of any metropolitan area in Ontario in terms of the resiliency of its electricity load profile as well as its sensitivity to the public health restrictions imposed to mitigate COVID-19.

However, as one illustration of the challenges that will linger even after the brunt of COVID-related impacts dissipate, the Conference Board of Canada is not expecting Ottawa's unemployment rate to revert to pre-pandemic levels until 2024. Similarly, there are several broader economic trends from which our community is not immune. A report from MNP found that over 50 percent of Canadians were \$200 or less from not being able to meet all of their bills and debt obligations each month. In addition, there remain enduring concerns around the affordability of electricity in Ontario, with commodity costs having risen steadily over 15 years and relief programs occupying a growing share of the provincial budget.

Taken together, these factors underscore what will be a heightened need over the 2021–2025 term for Hydro Ottawa to be attuned and responsive to the pressures facing our community, and to proactively pursue initiatives aimed at helping our city to move forward.

### **Workforce and Workplace of the Future**

This Strategic Direction is being released against the backdrop of historic shifts in the labour market, many of which have been accelerated by COVID-19.

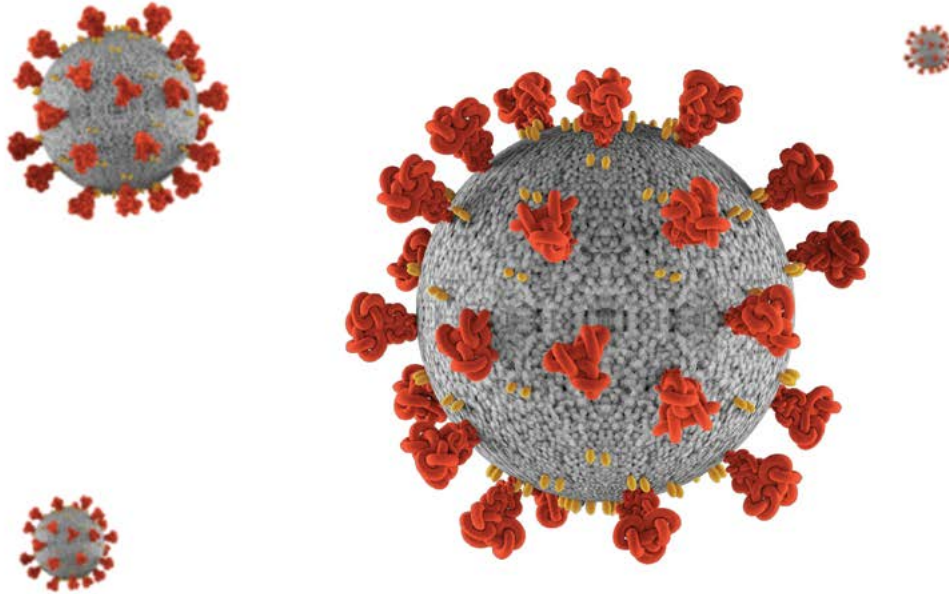
These include the movement towards remote work environments; the digitization and automation of core business platforms and processes; increased utilization of “gig” or freelance workers; a greater focus on fostering cultures of collaboration and shared purpose; and a heightened emphasis on employee diversity, equity, inclusion, and empowerment. At the same time, the pandemic has prompted an exceptional uptick in employee resignations, giving rise to what is being called “The Great Resignation” and triggering a “war for talent” amongst employers who find themselves having to implement different approaches and incentives in order to fill vacant positions.

On their own, these shifts in the popular understanding of the nature of work and the workplace will have significant implications for how employers will be able to attract, retain, and nurture talent going forward. When layered on top of pre-existing workforce challenges, especially the utility industry's struggle with the number of skilled workers eligible for retirement, the complications are compounded further. The ability of Hydro Ottawa to proactively prepare for and mitigate these impacts will be a critical determinant of whether core business objectives and customer needs are met over the next five years and beyond.



## 3.2 ADDITIONAL CONSIDERATIONS

In addition to the “5 Ds”, there are two other critical factors whose impact on our strategic context for the 2021-2025 period is unique and substantive.



### **COVID-19 Pandemic**

At the time of the formulation of this Strategic Direction, the world continues to grapple with the effects of the COVID-19 pandemic. The lives of our community, customers, employees, and other stakeholders have been disrupted in an unprecedented manner, to say nothing of the severe mortality and economic impacts. The pandemic is expected to have an ongoing effect on how people live, work, and play – certainly in the near term, if not the long term. Hydro Ottawa will be affected by any such societal changes that occur.

### **Relationship with the City of Ottawa**

Hydro Ottawa enjoys a special and multi-faceted relationship with our namesake city. The municipality is our shareholder, our customer, and our community. Hydro Ottawa and the City have forged an exemplary partnership over several decades that has helped both parties achieve their respective mandates and objectives.

Looking ahead to the 2021-2025 horizon, there will be numerous opportunities for leveraging and growing the relationship. Hydro Ottawa will be a committed ally in the City’s push to achieve early momentum in advancing its objectives for decarbonizing local energy systems and reducing Ottawa’s emissions profile. At a time when the City faces many competing pressures, including those arising from COVID-19 and its ongoing effects, the company can likewise lend support to the planning and delivery of major community-building projects, such as the next phase of Light Rail Transit, expansion of The Ottawa Hospital, and development of Lebreton Flats.

All told, this refreshed Strategic Direction term looks set to mark a new chapter in the valued collaboration with our municipal partners.





# 4. Strategic Direction

## 4.1 OUR MISSION

**To create long-term value for our shareholder, benefiting our customers and the communities we serve**

Hydro Ottawa is both a community asset and an investment for our shareholder, the City of Ottawa. As a community asset, our purpose is to provide efficient and reliable services and a first-class customer experience, and to continue to be a strong strategic partner with the City, helping to deliver on its economic development and environmental agendas. As an investment, our purpose is to provide stable, reliable, and growing returns, and to increase shareholder value both in the short and long term.

## 4.2 OUR GUIDING PRINCIPLES

Hydro Ottawa is committed to creating long-term value in a manner that will withstand the test of public scrutiny and inspire confidence and trust. To that end, we strive to achieve excellent operating and financial results while abiding by professional standards of conduct. We are guided not only by legal obligations, but also by best governance and business practices, and standards established by independent agencies. These expectations provide the foundation for our commitment to all of our stakeholders, and are reflected in our organizational values, our Code of Business Conduct, and our operating policies and procedures.

These guiding principles have served Hydro Ottawa and our stakeholders well over the course of successive strategic planning cycles. They are more relevant than ever in light of rising public and private sector interest in ESG factors, and thus attest to Hydro Ottawa's leadership as a forward-thinking and purpose-driven corporation.

### 4.2.1 OUR ORGANIZATIONAL VALUES

At Hydro Ottawa, we are committed to an organizational environment that fosters and demonstrates ethical business conduct at all levels and reflects our shared values of teamwork, integrity, excellence, and service. Every employee must lead by example in this endeavour.

### 4.2.2 OUR COMMITMENTS TO OUR STAKEHOLDERS

Hydro Ottawa takes into account the interests of all our stakeholders including employees, customers, suppliers, our shareholder, and the communities and environment in which we operate.

#### Employees

The quality of our workforce is our strength and we will strive to hire and retain the best-qualified people available and maximize their opportunities for success. We are committed to maintaining a safe, secure, and healthy work environment enriched by diversity and characterized by open communication, trust, and fair treatment.

#### Customers

Our continued success depends on the quality of our customer interactions, and we are committed to delivering value across the entire customer experience. We are honest and fair in our relationships with our customers, and provide reliable, responsive, and innovative products and services in compliance with legislated rights and standards for access, safety, health, and environmental protection.

### **Suppliers and Contractors**

We are honest and fair in our relationships with our suppliers and contractors. We purchase equipment, supplies, and services on the basis of merit, with a preference for local procurement. We pay suppliers and contractors in accordance with agreed terms, encourage them to adopt responsible business practices, and require them to adhere to our health, safety, and environment standards when working for Hydro Ottawa.

### **Community and the Environment**

We are committed to being a responsible corporate citizen and will contribute to making the communities in which we operate better places to live and do business. We are sensitive to the community's needs, and dedicated to protecting and preserving the environment where we operate.

### **Shareholder and Other Suppliers of Finance**

We are financially accountable to our shareholder and to the institutions that underwrite our operations, and communicate to them all matters material to our organization. We protect our shareholder's investment and manage risks effectively. We communicate to our shareholder all matters that are material to an understanding of our corporate governance.







## 4.3 OUR VISION AND STRATEGY

### 4.3.1 OUR VISION

Hydro Ottawa – a leading partner in a smart energy future

#### ***Leading...***

For Hydro Ottawa, leading means consistently being among the top performers in the business, in every critical area of our operations, and being regarded as a credible and trusted voice in our industry, helping to shape policy, regulatory, and operational responses to the critical issues of the day.

Leading means not merely reacting effectively to the transforming utility landscape, but proactively seeking opportunities to accelerate the adoption of smart and sustainable energy solutions. We want our customers and our community to have the benefits this can provide, and we think local utilities have a critical role to play in making these solutions a reality.

To ensure we are leading, we will continue to recruit and fully leverage the talents of great people, listen to innovators and stakeholders in our community, partner with educational institutions, and work closely with other leading companies to help drive innovation.

#### ***Partner...***

Utilities such as Hydro Ottawa will play a critical role in building a smart energy future, but we are not the only essential players. Indeed, customers are becoming the most important participants in the electricity market. The transition to a smart energy future will be driven by consumers' needs, preferences, and objectives.

At the same time, customers and communities can reach these goals faster and more fully when their local utility is proactive and innovative. The customer is at the centre of our business, and our aim is to be their trusted advisor and energy partner.

As a City of Ottawa-owned company, we are equally committed to the well-being of our community. We will continue to be a strong partner with our shareholder, helping to deliver on its energy, economic development, and environmental agendas.

Partnership means working together, in ways that may be familiar or new. It means re-examining our work methods and being flexible, entrepreneurial, and open to new possibilities.

#### ***...in a Smart Energy Future***

There are many descriptions of what “smart energy” looks like. What we mean is an energy system that makes effective use of available technologies to maximize consumer, community, and environmental benefit. By definition, then, it is sustainable, customer-centric, reliable, cost-effective, secure, and constantly evolving. It is responsive to shifting needs and opportunities, and focused on tangible benefits.

This provides a standard for assessing progress towards our vision – how sustainable, customer-centric, reliable, cost-effective, secure, and responsive is the energy system we are helping to create? The goalposts are continuously moving as technology and consumer needs evolve, but these criteria help us to know if we are advancing in the right direction and at the right pace.

Smart energy is also a foundational component of a Smart City, and Hydro Ottawa will welcome opportunities to collaborate in the pursuit of that objective.

### 4.3.2 OUR STRATEGY

The essence of Hydro Ottawa's strategy is to put the customer at the centre of everything we do. Reorienting our business around the customer was the primary goal of our previous Strategic Directions, and customer centrality continues to drive our business strategy.

One of the key ways in which we have sought to maximize value across the customer experience is through a rigorous commitment to sustainability and the implementation of sustainable business practices. This approach has yielded numerous benefits from a customer perspective, including increased availability of digital services, expanded access to local sources of renewable energy, and a growing menu of advanced energy solutions and expertise.

In this Strategic Direction, we are putting even more emphasis on sustainability, including doing our part to address the generational challenge of climate change. This positions us to meet the needs of an evolving electricity marketplace and enhance our responsiveness to customer and stakeholder priorities.

Accordingly, our strategy for the 2021-2025 period involves:

- Achieving net zero operations by 2030;
- Becoming the partner of first choice for signature green energy and carbon reduction projects in our community;
- Accelerating digital transformation to enable sustainable business practices;
- Leveraging and promoting distributed energy resources;
- Continuing to grow and diversify our revenue sources;
- Growing our social license to operate;
- Ensuring organizational capacity, culture, and leadership to deliver in a post-pandemic environment; and
- Continuing to provide best-in-class customer service.

To ensure we have the scale, financial capacity, and culture of innovation necessary to deliver on this agenda, our strategy includes a continued focus on strategic business growth within our core areas of strength. Our growth agenda involves four basic components:

- **Electricity Distribution:** expanding our grid to accommodate new customers and continuing to evaluate opportunities to increase our service territory;
- **Renewable Generation:** increasing the supply of clean energy for customers and earnings for our shareholder by making smart investments in renewable generation;
- **Energy Services:** providing innovative and sustainable solutions to help consumers, businesses, public sector agencies, and communities meet their energy objectives through energy management, conservation, efficient streetlighting, energy generation, energy storage, EV charging, suite metering, district energy, demand response, and GHG reduction, monitoring, and reporting opportunities, among others; and
- **Utility Services:** leveraging our assets and expertise to help other utilities to enhance the value they provide, creating new revenue streams and economies of scale.

To keep us on course in achieving our strategy, this Strategic Direction is structured around four critical performance categories that have stood the test of time and driven our success to date – our Four Key Areas of Focus. They will guide our activities throughout the current plan as well, with Customer Value continuing to be the central driver of our business strategy and with greater emphasis on sustainability across our business practices.



## 4.4 DELIVERING ON OUR VISION – FOUR KEY AREAS OF FOCUS

### CUSTOMER VALUE

**We will deliver value across the entire customer experience**

- by providing reliable, responsive, and innovative services at competitive rates

### FINANCIAL STRENGTH

**We will create sustainable growth in our business and our earnings**

- by improving productivity and pursuing business growth opportunities that leverage our strengths – our core capabilities, our assets, and our people

### CORPORATE CITIZENSHIP

**We will contribute to the well-being of the community**

- by acting at all times as a responsible and engaged corporate citizen

### ORGANIZATIONAL EFFECTIVENESS

**We will achieve performance excellence**

- by cultivating a culture of innovation and continuous improvement

# NET ZERO BY 2030

## A FIRST FOR ANY MUNICIPAL UTILITY IN CANADA

A cornerstone of this Strategic Direction is a whole-of-company initiative to become the first municipally-owned utility in Canada to achieve net zero operations. Our goal is to reach this critical milestone by 2030.

This is an ambitious undertaking that cuts across all our Key Areas of Focus and represents a natural next step in our company's sustainability journey. For more than a decade, we have been working to reduce the environmental impact of our operations – for example, by greening our fleet, diverting a high percentage of our waste, and designing and building our new facilities to LEED Gold standards. We have also contributed to a cleaner, healthier environment in our community by developing local sources of renewable energy, expanding access to EVs, and supporting sustainable forms of public transit such as light rail and zero-emission buses. As a result, Electricity Canada designated Hydro Ottawa as a Sustainable Electricity Company™ in 2021.

But the generational challenge of climate change requires that we all move faster to reduce our emissions and Hydro Ottawa is committed to leading the way in our sector. Achieving net zero means reducing our emissions as much as possible, and counterbalancing the remainder with the removal and avoidance of an equivalent (or greater) amount of emissions from the atmosphere.

Our immediate focus will be on minimizing our own footprint to the lowest feasible level, moving as much of our vehicle fleet as possible to zero-emissions technology and decarbonizing energy use at our facilities. We will also work with our employees and contractors to reduce emissions beyond our direct control, such as emissions from commuting. Beyond these priority areas, we will examine potential investments in carbon avoidance and removal opportunities, which may include reforestation or other nature-based solutions.

Moreover, through our leadership in this space, we hope to act as a catalyst for other organizations and stakeholders in our community to take similar action. Where we can lend support in sharing our experience and expertise, we will certainly do so.

Hydro Ottawa is developing an action plan – informed by our customers, employees, and other stakeholders – to guide our way forward. Admittedly, it may be some time before we have the detailed roadmap to reach our destination. But our commitment is firm – net zero is going to happen. We will dig as deep as we need to in order to get there.

We draw inspiration from U.S. President John F. Kennedy's "moonshot" initiative. When he first announced plans to land astronauts on the moon and return them safely to Earth, there was no known capability to achieve this ambitious vision. But through ingenuity and resolve, JFK and his successors made their goal a reality – and so will we.

#### 4.4.1 CUSTOMER VALUE

As a company that provides an essential service to the public, nothing is more critical to Hydro Ottawa's success than the ability to deliver value to our customers.

We know that "value" can mean different things across our diverse demographic of residential, small business, large commercial, and institutional customers. In addition, we are acutely aware that it is not just the needs of our customers that are evolving, but their place within the larger electricity system as well. For example, customers are no longer just passive consumers of electricity. Some are becoming "prosumers" – managers, generators, and sellers of their own energy, equipped with sophisticated tools and a growing mix of options.

This changing energy landscape, along with our goal of helping to lead a smart energy future, requires a shift in how we understand and interact with our customers. Utilities have traditionally viewed customers as the delivery point located at the end of a wire, but this lens is outdated and inadequate. Our understanding of our customers and how we can meet their energy needs has to be broader and deeper. Fortunately, Hydro Ottawa has been at the vanguard of our industry for more than a decade in evolving our thinking along these lines. As a result, we are well-suited to an environment in which customer profiles and preferences are becoming more complex.

With this in mind, we have adopted a whole-of-company customer experience strategy for the 2021–2025 period. By developing a customer-centric culture and investing in leading-edge services, technologies, and processes, we envision a customer experience defined by the four following outcomes:

- **Convenience** – Hydro Ottawa is an easy company to do business with
- **Choice** – customers have options to meet their needs and goals
- **Control** – customers are empowered to manage their energy use and costs effectively and sustainably
- **Communication** – Hydro Ottawa communicates with customers through their preferred channel in a way that is caring, knowledgeable, proactive, and efficient

Different segments of our customer base may have distinct interpretations of what these outcomes will look like. The challenge and opportunity for Hydro Ottawa is to be responsive to these varying needs, and to maintain customer satisfaction in tailored ways. We are confident that we have the right strategy to achieve this balance and to build on our strong record of service and satisfaction.



## New Products and Services

During our previous strategic planning term, Hydro Ottawa expanded our menu of innovative product and service offerings for customers. Examples include a best-in-class mobile app, a voice assistant Smart Speaker skill (the first of its kind by a Canadian electric utility), a pilot program to study at-home EV charging patterns, and contact centre service on Saturdays.

In the coming years, Hydro Ottawa will continue raising the bar when it comes to products and services that add value to customers and simplify interactions with the company.

A focal point will be accelerating the digital transformation of our business, using the power of technology to offer enhanced service to customers anytime and anywhere. Among its other impacts, the COVID-19 pandemic elevated customer expectations for easy and fast online service. Meeting and exceeding these expectations is now table stakes for electricity providers.

Accordingly, we will explore opportunities for more service automation and integration of AI. Our aim is to provide an automated, digital solution to fulfill any transactional need that does not require support from a customer service agent (although agents will of course remain available to assist whenever needed). For example, deployment of AI-powered chatbots will provide a 24/7 capacity to assist customers with general

inquiries and self-serve requests. Enhanced outage communications will likewise be a priority, with the goal of timely automated notices for both planned and unplanned outages.

Similarly, a signature program for the next five years involves establishing a 360-degree view of customer activity. A customer's engagement with Hydro Ottawa may take numerous forms – phoning the Contact Centre, using our mobile app, requesting a specific service, responding to a survey, or posting on social media. A holistic picture of the many touchpoints through which a customer connects with us will offer enriched intelligence and, in turn, enable a more personalized experience.

As we push to expand and enhance our digital service offerings, Hydro Ottawa will ensure that the privacy of customer data is effectively safeguarded. To this end, the company is set to implement a new framework for the protection, use, disclosure, and retention of customer data.

## Sustainable Energy Solutions: Emissions Reduction, Distributed Energy Resources, and Conservation

More businesses and MUSH sector entities (municipalities, universities, schools, hospitals) are signalling interest in greening their operations and enjoying more control of their energy options. Accordingly, we are committed to becoming our customers' preferred partner for sustainability solutions.



Whether it is a community housing provider seeking to lower its energy costs, a mixed-use building exploring rooftop solar and on-bill credits for tenants, an institutional campus planning a district energy system, or a business owner who wants a storefront EV charger, Hydro Ottawa will be there to help these customers bring their aspirations to life.

We are well-positioned for such a role, having cultivated green energy and carbon reduction service offerings, skill sets, and expertise across our lines of business. Our energy services arm, Envari, is the City of Ottawa's preferred energy management partner, and numerous opportunities exist for similar arrangements with other commercial and MUSH sector clients. A major priority for the next five years will be strengthening Envari's position as the go-to provider of energy efficiency and sustainability solutions for customers.

Furthermore, within our distribution business, Hydro Ottawa is actively testing how decentralized grid technologies can meet both customer and system needs. Through the OEB Innovation Sandbox, we are collaborating with the City, clean energy stakeholders, and community housing groups on several pilot projects. These initiatives contemplate the use of virtual net metering and DERs to assist customers in generating their own renewable power, using electricity more efficiently, and reducing the emissions profile of heating systems in buildings. There is likewise potential for DERs to help meet system capacity requirements that will be identified through the next round of the IESO's regional planning process, which is slated to take place towards the end of the 2021-2025 period.

Similarly, although the provincial government has centralized the delivery of conservation and demand management (CDM) programs, Hydro Ottawa will continue offering CDM services to our customers. As part of the settlement of our 2021-2025 distribution rate application, we were successful in retaining in-house CDM resources. We intend to place this competitive advantage at the service of customers, supporting them in reducing demand and achieving energy savings.

## **A Reliable, Modernized Smart Grid**

Innovative digital services and decentralized energy solutions present exciting possibilities for customers. At the same time, they will help us fulfill our customers' greatest expectation – the safe and reliable operation of the grid. Ultimately, we know that our value proposition as an electricity provider begins and ends with reliability.

During the 2016-2020 period, we completed the largest distribution capital investment program in our history, with aging infrastructure posing a heightened need for asset replacement, and with population growth requiring more capacity and new customer connections. These investments have proved their value several times over. Amongst our peers in Ontario, Hydro Ottawa has maintained the strongest overall reliability performance in recent years. We have also been able to recover more quickly from severe weather, as illustrated in 2018 when we restored power to 95 percent of customers within 72 hours of six tornadoes wreaking havoc across our city.

Challenges like aging infrastructure and system constraints will carry over into this new Strategic Direction term. Although investment will not match the historic highs of the last five years, it will nevertheless be significant, with \$505 million in capital spending planned in order to address infrastructure, equipment, and workforce needs.

As in recent years, a key principle for our 2021-2025 program is that system modernization goes hand-in-hand with system investment. As we replace aging infrastructure, we are also transforming our system into an intelligent, automated, and resilient grid to meet the needs of the future.

Our plan therefore includes the implementation of an Advanced Distribution Management System, which will optimize the integration of DERs and enable "self-healing" capability – i.e. automated outage restoration. In addition, with first-generation smart meters having reached end-of-life, Hydro Ottawa will roll-out advanced metering infrastructure with enhanced data analytics capability, presenting opportunities for new insights and improved services to customers. Linking many of these Smart Grid initiatives together will be a 245-kilometre network of fibre optic infrastructure which was installed over the last few years and which will serve as the high-speed communications backbone for our system.



In addition, we will provide greater supply capacity for growing parts of our service territory. In 2022, Hydro Ottawa will energize the largest substation project in our history – the Cambrian Municipal Transformer Station. Cambrian will provide much-needed capacity to southern Ottawa, which is experiencing significant population and economic growth. The station has the added benefit of utilizing transformers with reverse power flow capability, which are designed to accommodate the injection of locally-sourced clean electrons onto the grid – representing a win-win for customers and the environment.

Grid investment will also enhance our resilience to climate change. As part of our most recent rate application to the OEB, we undertook a formal distribution system climate risk and vulnerability assessment. Over the course of 2021–2025, we will implement the action plan emerging from this study.

### **Through COVID-19 and Beyond**

As a final point, it merits acknowledgement that this Strategic Direction is being released in the midst of a fluid public health landscape, with our community still navigating the impacts of COVID-19. Since day one of the pandemic, Hydro Ottawa has sought to do everything we can to support customers: offering flexible payment plans; advocating for provincial relief; limiting planned outages; and contributing to community assistance programs. While the impacts of COVID-19 have been severe, the light at the end of the tunnel is growing brighter as we finalize this Strategic Direction. Regardless of how long it takes, and mindful that a post-pandemic environment may present new circumstances and challenges, we are committed to supporting our customers with the utmost care and flexibility, and to upholding our pledge to put them at the centre of everything we do.



#### 4.4.2 FINANCIAL STRENGTH

Over the course of our most recent strategic planning cycles, Hydro Ottawa has achieved strong financial results, having largely met or exceeded the targets set out in our five-year plans.

Like the vast majority of businesses, our revenues were adversely impacted by COVID-19. Nevertheless, the company was still able to achieve 108 percent of our dividend target and 97 percent of our net income target for the 2016–2020 period – an impressive result, given the circumstances.

Since 2004, Hydro Ottawa has delivered over \$300 million in dividends to the company's shareholder, the City of Ottawa. These payments help fund municipal programs and services. And in recent years, the City has allocated the portion of our dividend payment exceeding our annual baseline commitment to energy efficiency and renewable projects. Under this new Strategic Direction, the cumulative dividend total will increase to nearly \$415 million by 2025.

Our objective over the next five years is to continue this trend of solid financial performance, while creating sustainable growth in our business and our earnings. To achieve this, Hydro Ottawa will maintain a focus on strategic growth within our core areas of strength and continue our evolution into a more vertically-integrated corporation.

Notably, Hydro Ottawa will achieve a significant milestone during this Strategic Direction cycle, with annual revenues surpassing \$300 million for the first time in the company's history.

Access to capital was a key priority in our previous strategy, in view of the \$1.1 billion required investment in distribution and generation infrastructure. It will remain a necessary focus for the new five-year term. We will continue to diligently explore opportunities to reduce costs through prudent financing strategies, building on successes such as our \$291 million Green Bond issued in 2019 – a first of its kind for a municipally-owned electricity provider in Canada.

Hydro Ottawa may again go out to the bond market during the 2021–2025 period. We understand that lenders will expect ESG measures to be a key component of that process. Accordingly, the company will continue to augment our ESG reporting over the course of this Strategic Direction timeframe.

#### Electricity Distribution

The Ontario Energy Board's approval of Hydro Ottawa's electricity distribution rates for 2021–2025 puts our regulated business on a stable financial footing throughout the period of this plan. This will allow Hydro Ottawa to make important investments in our distribution system to maintain reliable service, without compromising the company's financial strength.

At the same time, revenue growth under the current regulatory model will remain modest. In order to manage the challenges of aging infrastructure, grid expansion, technological evolution, and workforce modernization, we are maintaining our focus on cost containment and productivity improvement.

Our attention on this front will be amplified by a unique provision in our OEB-approved rate plan. Five performance metrics were established with corresponding annual targets. If Hydro Ottawa fails to achieve any of these targets in a given year, the company must refund a specific dollar amount to customers. This innovative regulatory mechanism is the first of its kind for any electricity distributor in Ontario, and will provide an extra level of accountability and incentive when it comes to linking performance with outcomes that are valued by customers.

Customer growth also has an impact on financial performance, since electricity distribution involves significant economies of scale. Our customer base grows by approximately one percent per year. Growth could also occur through consolidation with other local distribution companies. Hydro Ottawa will continue to examine opportunities to expand our service territory through mergers, acquisitions, or strategic alliances where there is a clear benefit to our customers and our shareholder.

In addition, we will continue to seek opportunities to monetize our existing assets, systems, and expertise. This may take the form of new services to customers; alternatively, it could involve expansion of our partnerships with other utilities.



## Renewable Energy

As the largest municipally-owned producer of green energy in Ontario, Hydro Ottawa is a leader in renewable energy generation. Our leadership position was significantly strengthened over the past decade, with renewable generation capacity having increased by over 500 percent and assumed a larger share of our revenue profile.

The last few years, in particular, have marked the achievement of key milestones. In 2017, we completed the construction of a new 29 megawatt hydroelectric facility at Chaudière Falls on the Ottawa River. In 2020 and 2021, refurbishment concluded on two hydro plants located on the Québec side of the river, with a combined capacity of 40 megawatts.

The total capacity at Chaudière Falls is now 85 megawatts, representing two-thirds of the 128 megawatt fleet of clean power generation owned and operated by our subsidiary, Portage Power. All of the generating stations in our portfolio are now fully in service, producing cost-effective electricity and displacing carbon emissions for customers in Ontario and New York.

The vast majority of our Canadian-based generation is covered by long-term power purchase agreements, providing stable revenues and minimizing exposure to spot market volatility. Indeed, the completion of the Québec plant refurbishment projects will boost annual generation revenues by more than 35 percent from 2020 through 2025.

Looking ahead, Hydro Ottawa will continue to examine opportunities to expand our hydroelectric generation capacity (both in Canada and the United States), with a preference for opportunities that involve stable pricing under long-term contracts.

The same applies to other forms of renewable energy, whether large or distributed in scale. The company is keen to expand our solar assets as well as our two landfill gas-to-energy plants, which may serve as a springboard for ventures in the field of renewable natural gas. Moreover, we are broadening the scope of renewable technologies which we will consider for investment.



Opportunities may emerge in a variety of forms, including potential community net metering projects, or the IESO's competitive procurements that will address emerging supply needs in Ontario. In addition, in order to achieve the clean energy, electrification, and GHG-reduction goals laid out in its Energy Evolution plan, the City of Ottawa is forecasting a need for thousands of megawatts of new locally-sited renewable generation. These and other initiatives present exciting and viable opportunities for growth.

To be sure, alongside seeking ways to increase our generation holdings, Hydro Ottawa is mindful of the need to optimize the performance of the assets in which we have already made significant investments. A new generation maintenance program will be implemented to this effect, along with sustained efforts to monetize the environmental attributes of our plants in New York State. A renewable energy credit market is likewise under review in Ontario, and Hydro Ottawa will pursue related opportunities if and when the market develops.

The first of Hydro Ottawa's supply contracts with the IESO is set to expire in the late 2020s. As such, the 2021–2025 period will involve focused planning on the future of the affected units. This effort will assess potential options to pursue, such as alternative revenue streams, in the event that expired contracts are not renewed. It may also examine whether price signals in a decentralized, local electricity market could support the ongoing operation of these units, and whether such an approach could align with the IESO's plans for market reforms.

### **Energy and Utility Services**

A third driver of financial strength will be the services we provide to a growing range of customers to help them meet their energy needs and objectives, and to other utilities to help them enhance the value they provide. These services can be grouped into two categories:

- *Energy Services*: providing innovative solutions to help consumers, businesses, governments, and communities meet their sustainable energy objectives through energy management, energy retrofits, conservation, efficient streetlighting,



energy generation, energy storage, EV charging, suite metering, district energy, demand response, and GHG reduction, monitoring, and reporting, among others; and

- *Utility Services*: leveraging our core systems and expertise to help other utilities to enhance the value they provide, creating new revenue streams and economies of scale.

Hydro Ottawa has taken several steps to position this business line for steady growth and expansion. In 2019, we carved out the energy and utility services business from our Energy Ottawa subsidiary, and re-structured it under a new subsidiary and brand, Envari. Similarly, where appropriate, the company has created new subsidiaries or entered into joint ventures to oversee the operations of specific business streams.

These realignments have strengthened the capacity of this line of business, as demonstrated by recent milestones. Through Envari, we successfully converted over 55,000 streetlights in Ottawa to efficient light emitting diode (LED) technology. The savings associated with this initiative – over \$5 million on an annual basis – enabled the City to repay the costs of the project in less than six years. The City likewise retained Envari for two other critical projects: management of a \$57 million upgrade of the cogeneration system at the municipality’s wastewater and treatment plant, and the installation of EV charging infrastructure for zero-emission buses. In addition, through an innovative joint venture, Hydro Ottawa has helped design, build, and commence operations of the district energy system for Zibi, a sustainable mixed-use community in downtown Ottawa and neighbouring Gatineau, Québec.

These successes portend a promising future for our energy and utility services business. Reaching this future will mean sharpening our performance in an increasingly competitive market. In this regard, there are several strategic imperatives to address over the course of this Strategic Direction period – and beyond.

First, in the coming years, there are plans for multiple large-scale community-building projects in Ottawa: development of Lebreton Flats; further expansion of Light Rail Transit; The Ottawa Hospital’s New Civic campus; and the numerous initiatives contemplated under the City’s Energy Evolution program, to name a few. Each of these endeavours has distinct goals for minimizing environmental footprints, procuring clean energy supply, and maximizing energy efficiency. Hydro Ottawa’s aim is to be the partner of first choice for such projects, leveraging our expertise to help bring initiatives of this nature to fruition.

Secondly, continued diversification of products and services, as well as our customer base, is essential. Rapid evolution in the energy marketplace demands that we proactively anticipate customer needs and craft solutions. As customer preferences evolve to encompass data management, building retrofits and automation, EV charging, distributed generation, energy storage, Energy-as-a-Service, and GHG reduction (among others), Hydro Ottawa will continue to expand our services and solutions. We anticipate that this diversification push will be bolstered by our own net zero transition and its enlargement of our sustainability expertise.

While the local market for sustainable energy is sophisticated and sizeable, it nevertheless has its limits. Expanding our services beyond Ottawa and Eastern Ontario is therefore a key element of our growth plan, with efforts focused on the commercial and MUSH sectors.

Finally, successful growth will hinge upon the ability to forge partnerships with other actors who bring complementary resources and competencies to the table. Where appropriate, we will replicate existing models which have proven their value, such as Zibi and service delivery agreements in which Hydro Ottawa provides our expertise to other utilities. Additionally, where there is suitable strategic alignment and cost-benefit assessment, we will consider equity investment in firms that can help us achieve our business objectives and expand earnings potential.



### 4.4.3 ORGANIZATIONAL EFFECTIVENESS

In our previous five-year strategy, we anticipated disruptions to our business and operations. To be sure, we experienced many such events and developments – historic floods, devastating tornadoes, a global pandemic, and public policy realignments, just to name a few. Time and again, Hydro Ottawa demonstrated our ability to overcome these challenges with professionalism and resilience.

Readiness and effectiveness will likewise be needed in order to execute on this new Strategic Direction's ambitious agenda for enhancing customer, shareholder, and community value, and for moving towards a net zero footprint. Achieving these objectives will require a constantly learning organization, with the right skill sets, organizational capacity, and culture to manoeuvre through the complexity and uncertainty ahead.

In this pursuit, we will cultivate a culture of innovation and continuous improvement, focusing on three outcomes: a safe and healthy work environment; an engaged, aligned, prepared, and diverse workforce; and efficient operations that are augmented by productivity measures and advanced technology.

#### Health and Safety

A fundamental component of Hydro Ottawa's commitment to operating effectively is the premium priority we place on protecting the health and safety of our employees and our community.

We have established an integrated occupational health, safety, and environment (OHSE) management system that has achieved and maintained certification to international standards since 2007. More recently, we transitioned our system to achieve certification to both ISO 14001 (environment) and 45001 (safety) standards, becoming one of the few utilities in Canada to secure dual certification. We provide safe work practices training for all employees consistent with industry best practices. Our company's safety performance has been solid, with the number of medical aid injuries, the number of lost work days, and the lost workday severity rate all trending well over the past few years.

Important initiatives for this new planning term include the development of action plans to further enhance safety performance and culture – both within our own workforce and with our contracted resources – and continuous improvement across the OHSE management system. Health and safety will continue to be a top priority for the company.

#### Workforce Capacity and Capability

A highly skilled, properly trained, knowledgeable, and diverse workforce is essential to Hydro Ottawa's continued success.

Like many other companies and utilities, we continue to face challenging workforce demographics that require a concerted response. More than 28 percent of Hydro Ottawa's workforce is expected to retire in the next 10 years. This represents a loss of approximately 4,100 years of experience, including 1,350 years of trades and technical experience. Fifty-six percent of frontline supervisors in trades and technical occupations are expected to retire by 2030.

The company's comprehensive Talent Management Strategy is aimed at anticipating and meeting talent needs through planning, talent attraction and acquisition, effective deployment of resources, performance management and development, and the articulation of a compelling employee-centered value proposition.

To ensure success, we have increased our focus on renewing our workforce by attracting and developing young workers. It is not simply a matter of recruiting replacements for retiring workers; we must also plan for and facilitate an effective transfer of knowledge and skills from our veteran workforce to the next generation, including the next generation of people leaders. An essential building block of this effort is our suite of apprenticeship and intern programs, including our partnership with Algonquin College in the delivery of our Powerline Technician Diploma Program, our in-house Power Cable Technician training and certification program, and our Engineer Intern Training and Development Program.





 POSI+

Another major challenge (and opportunity) for this Strategic Direction term will be adjusting to the realities of a post-COVID-19 landscape. The pandemic accelerated many shifts that were already underway in the workplace and heightened expectations for employment that offers flexibility, opportunity for growth, and purpose. In turn, Hydro Ottawa is assessing what the “future of work” and the “next normal” may look like in our unique context, where we can benefit from new labour market trends, and how we can gain an advantage in the “war for talent.” Initial plans include pilot projects to explore new ways of working in hybrid settings.

We are also working to attract and develop new skill sets that will be needed as we work towards a smart energy future. This will ensure we are able to build and sustain relationships with our customers, innovate and transition to new technologies, develop new products, services, and work processes, meet changing operational and regulatory demands, and achieve our net zero commitment.

As our business is changing, the profile of our workforce is also changing. It is increasingly diverse in age, skills, background, belief, ethnicity, sexual orientation, and in many other ways. We aim to create a thriving and respectful workplace, and enable each employee to bring their whole self to work every day. In support of these goals and in step with our ESG practices,

we have launched a new five-year Diversity, Equity, and Inclusion (DEI) Plan. Built on the successes and lessons learned from previous plans, it focuses on leadership accountability, education and awareness, addressing barriers to participation, and ensuring data-driven decision-making. As this plan underscores, Hydro Ottawa treats DEI as a business imperative that is essential to growth and innovation.

Furthermore, we will continue to engage our employees in enriching our organizational culture and embedding the attributes of safety, accountability, innovation, entrepreneurship, and customer focus.

### **Productivity and Technology**

At the outset of the 2021–2025 period, Hydro Ottawa is confronting a myriad of overlapping pressures, such as replacing aging infrastructure, supporting customers in the midst of a pandemic, and enabling a transition to a decarbonized future – all while minimizing upward pressure on rates. In this context, we must continually find ways to work smarter and we are doing just that.

Improvements in workplace productivity have been anchored in a journey of digital transformation and automation. In recent years, we have phased-out legacy business systems and manual processes in favour of leading-edge digital platforms and solutions. Our approach has been animated by the principle of “Anytime, Anywhere, on Any Device.” Employees are



equipped with self-serve, mobile-enabled technology that makes work more collaborative, dynamic, and convenient, whether in the field, in the office, or at home. This philosophy has likewise shaped our modernized approach to employee learning, with training taken out of the classroom and put into the hands of learners through digital means.

The organizational readiness and flexibility enabled by our Digital Strategy was put on display in March 2020, following the Government of Ontario's declaration of emergency in relation to COVID-19. In short, we pivoted our operations rapidly and seamlessly. Office-based employees transitioned to remote working, while field crews moved to modified schedules and environments, with both groups supported by the necessary digital tools. A cloud-based customer contact solution was also rolled out to ensure service continuity, while our control room employees were split into two teams and assigned to separate locations, each with full system office functionality.

Over the 2021-2025 period, we will accelerate our digital transformation and continue leveraging innovative technologies to enhance customer service, improve operational agility, increase automation, and empower employees to make faster, more informed decisions.

Against this “digital by default” backdrop, the security of our information and operational technology systems against cyber security threats remains a crucial imperative. The company works closely with industry partners and security agencies, and maintains a best-in-class program of cyber defenses and controls. Hydro Ottawa will continue to draw on both internal and external resources to ensure vigilance in the mitigation of cyber risks and protection of mission-critical systems.

In addition, we will maintain our practice of setting annual productivity improvement targets, with a focus on reducing waste, improving the efficiency of our capital work, reducing operating costs, and maximizing the effectiveness of our operations through organizational rightsizing and right-skilling.

Our new office buildings, completed in 2019, were specifically designed with employee productivity and innovation in mind. While COVID-19 required pivoting much of our operations to remote work environments, the anticipated return to work post-pandemic presents the opportunity to begin fully leveraging our new facilities' potential for enhanced workplace productivity.



# Building a Smart Energy Future through Innovation



## Energy Data Dashboard

Cloud-based solution allowing building owners to save money and reduce waste



## Battery Loan Program

Complimentary loan of portable battery packs to customers affected by planned outages



## Cold Climate Heat Pumps

Pilot project offering homeowners an energy efficient alternative to conventional heating



## Net Zero Energy for Sustainable Living

Partnership in zero carbon district energy system for the Zibi community



## EV Everywhere

Management of EV charging during peak demand periods using artificial intelligence



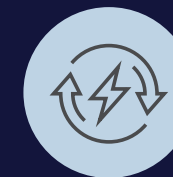
## Voice-Activated Customer Assistance

First utility in Canada to develop a Smart Speaker skill to answer common customer questions



## Virtual Reality Training

Giving trades employees exposure to tasks and procedures in a virtual environment



## Building a Self-Healing Grid

Installation of sensors on the grid to provide real-time outage intelligence



#### 4.4.4 CORPORATE CITIZENSHIP

As a community company that delivers an essential service to Ottawa residents – and whose predecessor companies have done so for more than 100 years – contributing to the well-being of the community has always been a part of Hydro Ottawa’s core mandate. We know how much energy matters to the daily lives of our customers and our community, and the responsibility to provide it efficiently and reliably has shaped the way we see ourselves as a company.

Out of this mandate, a commitment to fulfill our ESG responsibilities as a company has naturally evolved. We will continue to deepen that commitment over the course of this plan, including through augmented reporting on our ESG performance.

This approach is not only true to our roots as a company, it enhances our corporate performance as well. As the growing movement around ESG in international markets and public policymaking has shown, good corporate citizenship can and does drive growth in value, as stakeholder trust creates new opportunities, reassures regulators, strengthens social license, increases customer loyalty, and attracts good business partners and talented employees.

To deliver on our commitment, we will continue to emphasize four aspects of good corporate citizenship: good governance; stakeholder engagement; environmental sustainability; and investing in our community.

##### Corporate Governance

Good corporate governance is the glue that holds together responsible business practices. By making governance a core focus over the past several years, Hydro Ottawa has established leading governance practices for a company of its size and mandate, and adheres to high standards of integrity, transparency, and disclosure. We will continue to ensure that this is the case, by regularly assessing emerging best practices (such as enhanced ESG reporting), and comparing ourselves to the best-governed private and public sector organizations.

##### Stakeholder Engagement

We also recognize that maintaining the trust and confidence of our stakeholders is essential to the company’s performance and social license to operate. We are committed to taking into account the concerns and interests of all our stakeholders, including employees, customers, suppliers, our shareholder, and the communities and environment in which we operate. Our commitments to these stakeholders are entrenched in the guiding principles set out in this Strategic Direction. We will continue to operate with their interests in mind, and will actively encourage their participation in shaping the future of the company. Our emphasis will be on increasing our understanding of stakeholder requirements and perceptions, and implementing timely, accurate, and transparent disclosure mechanisms and communication.

This will include preserving the valuable engagement practices that have emerged amidst the constraints imposed by COVID-19. For example, customers and stakeholders have welcomed Hydro Ottawa’s use of virtual open houses to provide information on planned work projects happening in specific neighbourhoods in the community.

#### HYDRO OTTAWA AND ESG - NEW TO THE NAME, NOT NEW TO THE GAME

Over the course of successive strategic planning cycles, Hydro Ottawa has executed projects, implemented practices, and conducted reporting in numerous areas that fall under the scope of ESG. Our Strategic Directions, as well as our integrated planning and performance management framework, are infused with ESG principles and objectives.

To date, this activity has not occurred under a formal ESG banner or program. It has occurred organically as part of our balanced scorecard approach to corporate performance and our long-standing commitments to sustainability and corporate citizenship.

Nevertheless, we have cultivated an exemplary record in ESG performance. In light of the growing prominence of ESG, going forward Hydro Ottawa will augment our ESG reporting and speak the language of ESG more fluently.

## Environmental Sustainability

For more than a decade, our company has been on a steady trajectory of balancing our growth and operations with protection of the environment.

Whether it is generating renewable energy, greening our fleet, reducing paper and water consumption, restoring public access to the Chaudière Falls site, or constructing facilities to LEED Gold standards, our track record in demonstrating continuous improvement in environmental performance is best-in-class. Our leadership in this space has been recognized by numerous third parties, including our recent designation as a Sustainable Electricity Company™ by Electricity Canada, and our inclusion in the annual roster of Canada's Greenest Employers for 10 years.

Hydro Ottawa's commitment to achieving net zero operations by 2030 represents a new, ambitious phase in our sustainability journey. In order to succeed, we will need to transform much of our business planning and operations, and benefit from the support of each

and every employee. Over the course of this Strategic Direction term, we will hold ourselves accountable in delivering on this objective through regular progress and performance reporting.

## Community Investment

Hydro Ottawa has a proud tradition of being a company that "gives where it lives." Our long-standing United Way workplace campaigns have raised more than \$2 million in the past 10 years. In addition, we recently fulfilled a five-year pledge to raise \$1 million in support of the Rose Ages Breast Health Centre at The Ottawa Hospital.

Our Community Partnership Investments, along with our employees' volunteer efforts, have contributed to many worthwhile local initiatives focused on at-risk youth, women's mental health, and combatting hunger and homelessness. These efforts will continue throughout the 2021–2025 period and will periodically evolve to achieve maximum impact and align with our role in the community.







# 5. Financial Outlook

## 5.1 FINANCIAL OUTLOOK

This financial outlook presents high-level projections for Hydro Ottawa's revenues, expenses, and major capital expenditures that support the company's business lines for the 2021-2025 period, and the underlying key assumptions and risks.

Hydro Ottawa's objective with respect to financial performance is to achieve sustainable growth in our business and our earnings. This creates value for Hydro Ottawa's sole shareholder, the City of Ottawa, including dividends and growth in the company's equity. It also enhances our ability to meet the energy needs of the communities and customers we serve. To achieve this key financial objective, Hydro Ottawa will continue to pursue excellence and strategic growth in our core business lines: providing efficient and reliable electricity distribution services; generating electricity from renewable resources; and offering a growing range of energy and utility services that help customers to meet their sustainable energy needs and objectives and other utilities to enhance the value they provide. We will continue to invest in our core distribution and generation assets, while improving productivity across all of our businesses and pursuing strategic growth opportunities that leverage our strengths.

Hydro Ottawa has achieved solid financial results since our 2016-2020 Strategic Direction was issued. We have surpassed most of the aggressive growth targets set out in that plan, notwithstanding the impacts of the COVID-19 pandemic. This continues a trend of consistent and sustained growth in net income and shareholder equity over time. Since the introduction of a dividend policy in 2004, Hydro Ottawa has delivered over \$300 million to the City of Ottawa.

This five-year financial outlook projects continued growth in shareholder value over the 2021-2025 period, including \$255 million in net income and dividends totalling \$110 million. This represents a new record for the company in terms of dividend payments during the five-year term of a strategic direction and will bring total cumulative dividends (i.e. since 2004) to \$415 million by 2025.

The financial projections set out herein reflect a continued focus on strategic business growth in our core areas of strength, as set out in the preceding sections of this Strategic Direction. They take into account current and future economic trends, the regulatory environment, and capital investments required to maintain and upgrade our electricity distribution and generation infrastructure.

### 5.1.1 REVENUE PROJECTIONS

Hydro Ottawa's revenues are projected to grow on average by 3.6 percent over the course of this Strategic Direction. With 2021 marking the completion of our major hydroelectric expansion and refurbishment projects, generation revenue is set to rise as production from our generation fleet is optimized over the 2021-2025 term. Revenue generated by our energy and utility services business line is likewise expected to increase steadily. As for electricity distribution revenues, they are projected to grow on account of capital investment in aging infrastructure and new planned customer connections. However, this growth will be moderate, as a result of such factors as an expected decline in consumption amongst small commercial customers during the early years of this five-year period (attributable to COVID-19 impacts).

Notably, Hydro Ottawa will achieve a significant milestone during this Strategic Direction cycle, with annual revenues surpassing \$300 million for the first time in the company's history.

The largest component in Hydro Ottawa's revenue forecast is the cost of power recovered from customers through provincially established rates. Cost of power is a flow-through amount, which poses limited risk to Hydro Ottawa's financial performance.

Hydro Ottawa Limited filed a Custom Incentive Rate-setting application with the OEB in February 2020 for electricity distribution rates for the period January 1, 2021 through December 31, 2025. The application was informed by customer input, with the company having conducted an extensive customer engagement

process prior to filing and having integrated feedback on priorities into our final business and investment plans. Throughout 2020, Hydro Ottawa participated in an open, public, and transparent process administered by the OEB with intervenors representing different customer groups. The OEB rendered a decision approving a five-year rate plan for the company in November 2020.

For an average Hydro Ottawa residential customer, the average change in distribution rates over the course of 2021–2025 will be 2.39 percent. Our new Strategic Direction term marks the first in which distribution rates for residential customers will be fully fixed. Hydro Ottawa transitioned to a fixed distribution charge in 2020, as per OEB requirements.

The distribution charge is the revenue retained by Hydro Ottawa and represents approximately 20 percent of the total bill. The remaining 80 percent includes commodity charges, provincially regulated charges, and harmonized sales tax. These revenues pass through Hydro Ottawa to electricity generators, Hydro One, IESO, the provincial government, and others.

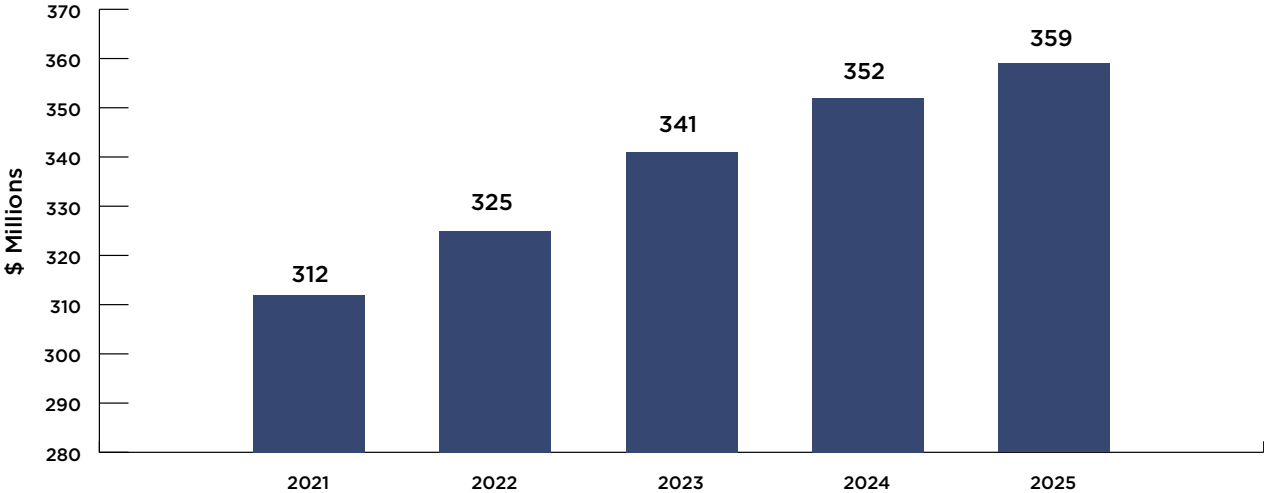
Generation revenue has increased significantly in recent years, primarily on account of the completion of the new 29 megawatt hydroelectric facility at Chaudière Falls

and the refurbishment projects at our hydroelectric plants in Québec. These investments represent a significant milestone in the company’s expansion of our green power portfolio, which has increased by over 500 percent since 2012 and will continue to deliver stable revenue streams over the next 40 years. Generation revenue projections are based on pricing in accordance with secured Power Purchase Agreements and open market projections, along with historic water level data to guide production assumptions.

For our energy and utility services business, we anticipate continued expansion of business activity and moderate increases in annual revenue. Key projects which are on track for the 2021–2025 term include the \$57 million planned upgrade to the City of Ottawa’s wastewater collection and treatment plant, installation of EV charging infrastructure for the City’s zero-emission bus project, and continued progress in the construction and operationalization of the district energy system for the Zibi community development.

The five-year revenue profile for Hydro Ottawa is as indicated in the chart below. Excluded from these projections are the cost of power flow-through.

### Revenue



### 5.1.2 COST DRIVERS

#### FLOW THROUGH COST OF POWER

Similar to revenues, Hydro Ottawa’s largest component of operating expense is the cost of power purchased from the provincial grid, which fluctuates based on the commodity price for electricity. This cost is designed by the OEB to be fully recoverable through the commodity rates charged to the customer. In the absence of regulatory change, there is limited risk to Hydro Ottawa’s financial performance from the cost of power. Risk arises from Hydro Ottawa Limited’s full responsibility for bad debts, as well as cash flow impacts from commodity rate increases, as the cost of power is the single largest monthly expenditure of the company.

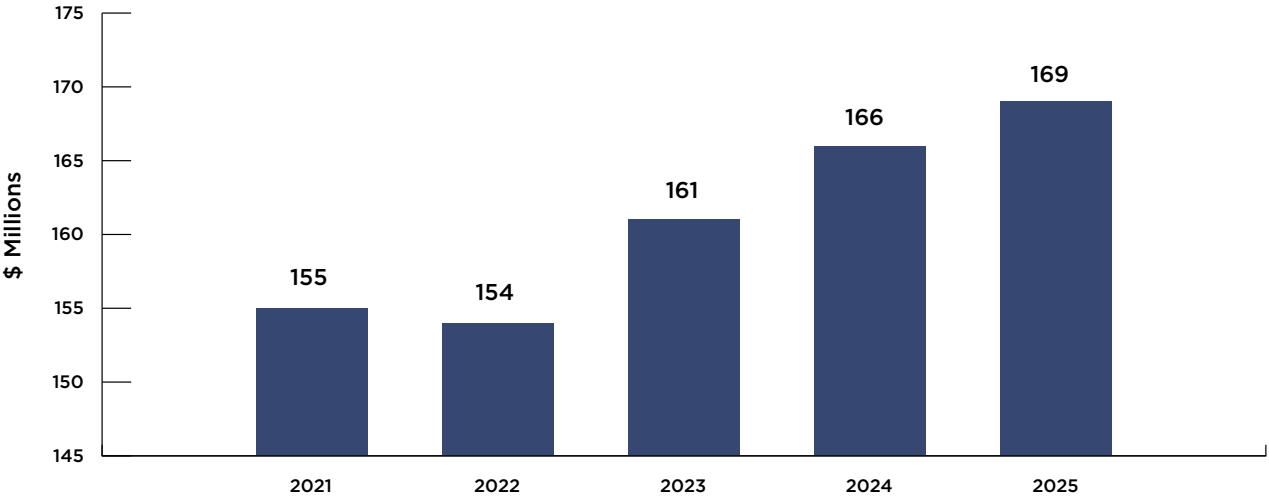
#### OPERATING, MAINTENANCE, AND ADMINISTRATION COSTS

The most significant cost directly controllable by management is operating, maintenance, and

administration (OM&A) expenses. This includes internal labour costs, direct material and program costs, and external service contracts. On a consolidated basis, annual OM&A is set to increase by 2.2 percent over the course of this Strategic Direction period, as shown in the graph below. For Hydro Ottawa Limited, its OEB-approved 2021-2025 electricity distribution rates prescribe OM&A increases using an escalator formula that is subject to annual adjustments.

Productivity improvements and cost containment are a must to offset the inflationary cost of labour, materials, and external service contracts integral to our business. Examples of such initiatives include digitization, process automation, cloud-based migration of business systems, operational reviews, material management, reduced overtime usage, cost-effective benefit plans, renegotiation of external service contracts, management of overdue customer accounts, and schedule optimization of crews and dispatch, amongst others.

### Operating, Maintenance, and Administration Expenses



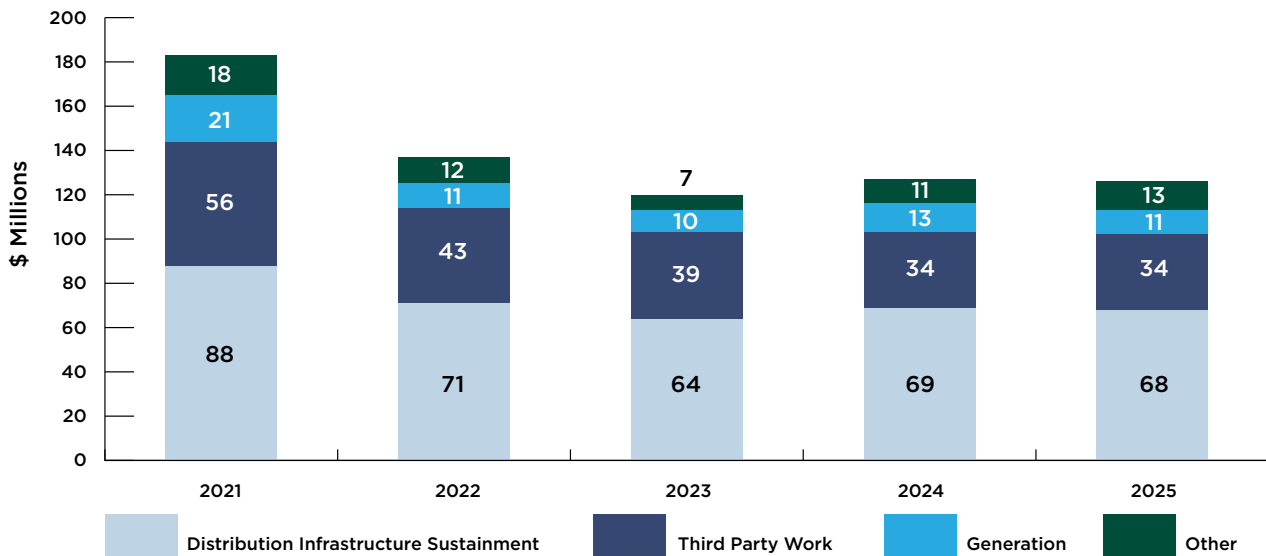
## CAPITAL EXPENDITURES

Aging infrastructure remains a reality for Hydro Ottawa and other utilities, with implications for service reliability. The need to invest in electricity distribution infrastructure to maintain high-quality service represents a significant cost driver. Electricity distribution and generation reliability are contingent upon life-cycle investment programs. The regulated distribution business will incur the majority of capital expenditures, as we continue to invest to sustain the reliability of the distribution system through rehabilitation and upgrades, as well as expansion of substations to accommodate

customer growth and provide sufficient capacity for emergency and peak load situations.

Hydro Ottawa invested \$1.1 billion in capital infrastructure over the 2016–2020 period, representing the largest capital program in the company’s history. While the 2021–2025 term will feature a diminished level of capital expenditures, the total planned spending envelope of \$700 million is nevertheless significant. Hydro Ottawa’s amortization expense and financing charges are reflective of this capital investment, and as a result are projected to increase over the period.

## Gross Capital Expenditures



## FINANCIAL PROJECTIONS

In summary, with Hydro Ottawa's Custom Incentive Rate-setting application approved for the 2021-2025 term, there is a secure level of funding available to maintain the reliability of Hydro Ottawa's electricity distribution operations. In addition, with our fleet

of expanded and refurbished hydroelectric plants becoming fully operational, our generation portfolio is positioned to deliver stable revenue streams over the next 40 years. This, combined with strategic growth in energy and utility services, along with other emerging business lines, enables the company to project \$255 million in net income over the next five years.

<b>FINANCIAL OUTLOOK</b>					
<b>Consolidated Statement of Income (\$ millions)</b>	<b>2021</b>	<b>2022</b>	<b>2023</b>	<b>2024</b>	<b>2025</b>
<b>Revenues</b>					
Power Recovery	851	948	1,007	1,053	1,108
Distribution Sales	199	208	219	227	230
Generation Revenue	64	71	72	73	74
Envari Revenue	26	30	35	37	40
Other Revenue	23	16	15	15	15
	<b>1,163</b>	<b>1,273</b>	<b>1,348</b>	<b>1,405</b>	<b>1,467</b>
<b>Expenses</b>					
Purchased Power	851	948	1,007	1,053	1,108
Operating, Maintenance & Administration	155	154	161	166	169
	<b>1,006</b>	<b>1,102</b>	<b>1,168</b>	<b>1,219</b>	<b>1,277</b>
<b>EBITDA</b>	<b>157</b>	<b>171</b>	<b>180</b>	<b>186</b>	<b>190</b>
Amortization, Interest, Taxes	109	122	129	133	136
<b>Net Income from Current Operations</b>	<b>48</b>	<b>49</b>	<b>51</b>	<b>53</b>	<b>54</b>

## 5.2 RISKS AND UNCERTAINTIES

As our track record over more than two decades demonstrates, Hydro Ottawa has the ability to manage and mitigate risk, to maintain flexibility, and to respond effectively to changes in our business environment.

Our Enterprise Risk Management (ERM) system establishes the framework to allow us to predict and respond to risks and opportunities impacting our Strategic Direction and business activities, and to do so in an effective, consistent, and integrated manner. Our five-year business planning cycle, with annual updates, also enables continuous review of assumptions and the state of the market in which we operate.

Key factors that could adversely impact the achievement of our projected financial results are outlined below.

### COVID-19 Pandemic

Hydro Ottawa's 2021–2025 Strategic Direction is being published in the midst of ongoing COVID-19 challenges and impacts. The benefits of mass vaccination are evident in a considerably lower level of fatalities. Yet, there could be multiple waves of less lethal but highly contagious strains of the disease before it subsides.

If that should be the course that COVID-19 takes before subsiding, it is possible that socio-economic activity over the next year or more may be punctuated by occasional stop-start phases that include restrictions on capacity and/or social interaction. In duration and in scale, these stop-start phases may have less impact than in 2020 or 2021, but they may still affect the strength and sustainability of the post-pandemic recovery.

In the short to medium term, economic recovery might be uneven across industries. Certain sectors (e.g. agriculture, hospitality and food services, small-scale retail) may experience far more difficulty, not only because of the withdrawal of government support programs, but also because of inflation. Accelerating at its fastest since 2003, inflation is also likely to take a toll on families and small businesses. Supply chain disruptions may exacerbate the adverse effects of inflation.

The pandemic's impact on mental health and social cohesion are already manifest, and may have a sustained, adverse, community-wide effect. From an employer's perspective, that could result in an impact on workforce availability and productivity.

Although employment in general has rebounded to near pre-pandemic levels, there continues to be a mismatch in labour supply and demand, with regard to professional, scientific, and technical services, in particular. The impact of this mismatch might linger for a considerable period as the federal government clears backlogs in the immigration and naturalization process.

The socio-economic and demographic effects of the COVID-19 pandemic are likely to have an impact on the Corporation's businesses, at least in the short to medium term.

The electricity distribution business, for example, could see a decline in its revenue and face difficulties in recovering its costs from customers who are in distress. There can be no certitude that regulatory mechanisms will allow for a level of recovery of the resultant financial losses.

Physical distancing requirements may affect the duration and effectiveness of construction activity, which could have an adverse impact on the electricity distribution business, as well as on the Corporation's generation and energy and infrastructure management businesses.

Some of the long-term effects of the pandemic, such as the shortage of affordable talent, might affect the Corporation's capacity to achieve its strategic and growth-related initiatives.

The repercussions of COVID-19 will be felt across the business environment for a considerable period of time. Inevitably, there is – and will continue to be – some impact on Hydro Ottawa, as on the community we serve.

While we are confident in our assessment of the post-COVID-19 business environment as a whole, future events may differ significantly from what we expect. Some of our assumptions may prove unwarranted. Subsequent events could change the complexion of current trends and not all opportunities currently envisaged may turn out to be viable.

## **Economy**

The state of the local, provincial, and national economy could have a significant impact on Hydro Ottawa's business performance, through factors such as interest rates, inflation, customer credit conditions, and weakening demand for electricity and/or value-added services.

## **Policy and Regulatory Environment**

Hydro Ottawa's largest business operates in a regulated environment. Our business performance could be adversely affected by significant policy and regulatory changes, including but not limited to changes in rate regulation, policies relating to the production and procurement of renewable and clean energy, conservation and demand management, the consolidation of electrical utilities, restrictions on utility service provision, or changes to license requirements.

The current state of policy and regulatory guidance and support in Ontario introduces considerable uncertainty for rate-regulated electrical utilities, particularly with regard to anticipating and meeting the requirements of a DER environment led by customers. It is also not known whether and how future policy initiatives and regulatory frameworks would be compatible with the Market Renewal program initiated by the IESO, as the program begins to take effect in the mid-2020s.

Uncertainty surrounding federal, provincial, and municipal policies and regulations on climate change response could also adversely affect the growth of some of Hydro Ottawa's unregulated, market-facing businesses.

## **Potential Disruption of Utilities' Business Model**

The convergence of DERs with IT could further disrupt the traditional business model of electrical utilities. As IT platforms develop to tie grid data, DER data, and customer-specific information together into a "virtual power plant," they may also become capable of networking multiple such self-contained virtual power plants into a single energy system. In time, they might be in a position to take over swaths of a local distribution company's service footprint. In addition,

organizations capable of developing distribution-edge software platforms and translating them into sustainable value propositions to customers could progressively dislodge the distribution utility from the customer interface, reducing the opportunity for revenues from value-added services.

## **Diversification of Revenue: Implications for Credit Ratings**

Over the last two decades, the consumption of electricity in Ontario, and elsewhere in North America, has remained relatively stable, reflecting underlying socio-economic trends, as well as the impact of conservation. The long-term impact to electrical utilities of the rapid shift from commercial and industrial electricity demand to residential, driven by the COVID-19 pandemic and widespread adoption of video-conferencing and working from home across multiple sectors of the economy, is difficult to assess at this stage.

Since 2008, Hydro Ottawa has been on a trajectory of diversifying its revenue and assets by expanding its presence in unregulated lines of business, including renewable energy generation and energy management services. This revenue diversification strategy has allowed Hydro Ottawa to get ahead of long-term trends within the industry, and contain rate increases for our customers, while steadily increasing shareholder value. Continued revenue diversification through the period of this Strategic Direction will also help the company offset the long-term impact of the COVID-19-driven shift in demand for electricity, from the commercial and industrial sector to the residential sector.

The need for electrical utilities to diversify their revenue and assets portfolio is gaining recognition in the financial community. In the short to medium term, however, there could be an adverse impact on Hydro Ottawa's credit ratings, which could increase the cost of borrowing.

### **Access to Capital**

As is the case with many municipally-owned electrical utilities, the infusion of additional shareholder equity in order to achieve growth objectives may not always be a feasible option for Hydro Ottawa. As a result, there may be constraints on the Corporation's debt capacity, which could in turn affect its ability to achieve some of the growth objectives outlined in this Strategic Direction.

### **Market Prices for Electricity**

Where revenue from electricity generation is linked to market prices, there could be revenue fluctuation due to a number of factors: the amount of excess generating capacity relative to load in that market; market structure; weather conditions which impact electrical load; growth in demand for electricity; absolute and relative prices for energy; and developments in conservation and demand management.

### **Exchange Rate Fluctuations**

Hydro Ottawa uses the Canadian dollar as its functional currency. It already owns generation assets in the United States, and might expand its operations and assets in that market during the next five years. A significant depreciation of the value of the U.S. dollar relative to the Canadian dollar may adversely affect the value of the Corporation's U.S.-based assets and the related revenues. Conversely, a significant depreciation of the Canadian dollar relative to the U.S. dollar may affect the expected rate of return on the Corporation's U.S. investments as well as the capacity to finance those investments.

### **Climate Change**

Climate change is affecting the rate of occurrence of extreme weather events and in some cases their severity as well. The impact of these events on North America's aging electricity grid will test utilities' capacity to respond to emergencies and restore power in a timely manner. Over the long term, grid renewal investments, such as those planned by Hydro Ottawa, should make the electricity system more robust. Regulatory and public support for such investments and the related management systems cannot be taken as a given, though expectations for utilities to be responsive, agile, and resilient during and after extreme weather

events are likely to remain. Accordingly, there could be a mismatch between the climate change resilience expected of utilities and the resources available to achieve this level of resilience.

### **Hydrology**

The amount of electricity generated at Hydro Ottawa's hydroelectric facilities depends upon available water flows and weather conditions, which vary naturally from season to season, and from year to year. Water flows may also be affected by natural disasters or through government controls and policies on water levels.

### **Dependence on Partners**

The growth opportunities identified in this Strategic Direction may depend upon the presence of willing partners and/or partners that perform to long-term expectations. An absence of willing merger or acquisition partners, or utilities and others willing to partner on service delivery, could have an adverse impact on Hydro Ottawa's ability to deliver on its financial objectives, as could the underperformance of key business partners.

### **Workforce Demographics**

Across the electricity sector, retirements are outpacing new entrants to the workforce, which could have an adverse impact on the ability of the Corporation to build a sustainable workforce and achieve its business objectives. Hydro Ottawa's investments in apprenticeships, internships, diversity and inclusion, knowledge management, succession planning, and retiree and older worker engagement programs are designed to manage risks relating to workforce demographics.

### **Technology Infrastructure**

The Corporation's business performance is dependent upon complex technology systems, including customer information and billing systems, advanced metering, and operational technologies such as geographic information systems, system control, and outage management systems. The failure of one or more of these key systems, or a failure of the Corporation to plan effectively for future technology needs or transition effectively to new technology systems, could adversely impact the Corporation's business operations.



Many of these key systems also draw upon data and signals from several hundred thousand smart devices (chiefly smart meters), as well as the related systems and web interfaces. The processing of data in many cases entails a number of automated interfaces, as well as multiple internal and external dependencies, including Ontario's Smart Metering Entity. Risks arising from the reliability and performance of any single component of this integrated network, or of the system as a whole, could lead to a disruption of key business processes.

There is growing convergence of core operational systems with enterprise information systems, along with increasing automation, and extensive use of common technology in facilitating such integration and connectivity. The complexity of this technology infrastructure, together with its interconnected nature, has the potential to heighten existing risks as well as to create new ones.

### Cyber Security

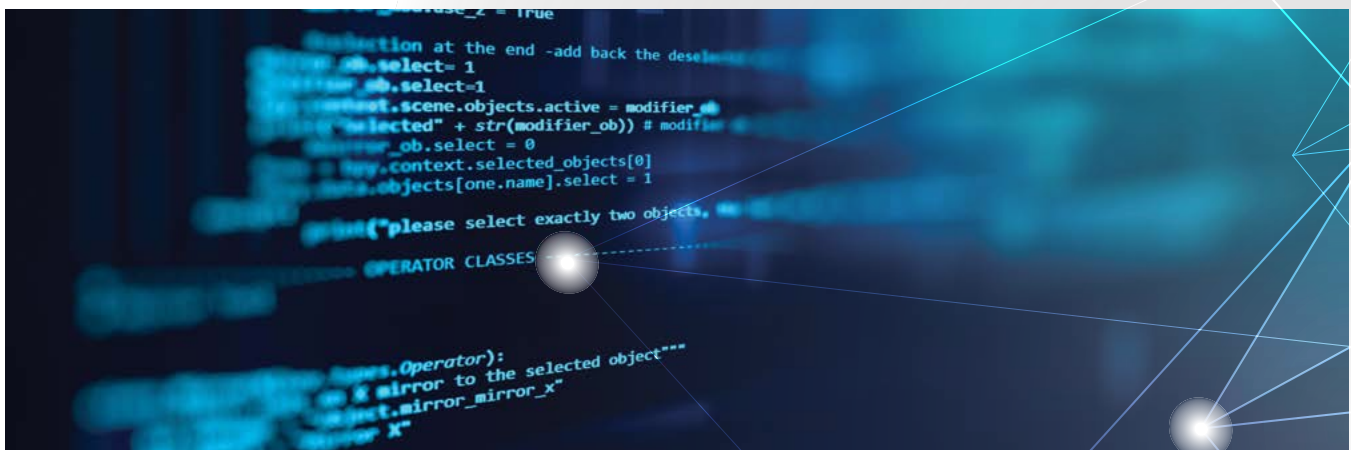
The Corporation's reliance on information systems and expanded data transmission and exchange networks, in conjunction with the growing extent of systems and data integration within the electricity sector, increases its exposure to information security threats, including cyber security risks. Hydro Ottawa's information systems and information assets could be put at risk by a security breach, data corruption, or system failure at a shared resource or common service provider. Cyber security risks could also be aggravated by the increased prevalence of working from home, potentially over an extended time period.

## 5.3 CONCLUSION

Subject to the risks and uncertainties discussed in this document, Hydro Ottawa will continue to provide efficient, reliable electricity distribution services to customers at a competitive cost, generate green power, and provide energy and utility services while maintaining sustainable earnings. The company will achieve this by continuing to invest in core distribution assets, improving productivity, and pursuing business growth opportunities that leverage corporate strengths.

Through the OEB's adjudication of Hydro Ottawa's 2021–2025 Custom Incentive Rate-setting application, the company has received approval for capital investment in electricity infrastructure for the next five years. Hydro Ottawa's customers will continue to benefit from reliable electricity distribution with stable, moderate, and predictable rate impacts. In our unregulated operations, we will experience a significant increase in renewable generation revenue, courtesy of our recently completed hydroelectric expansion and refurbishment projects, while our energy and utility services business remains on track for steady expansion.

In sum, Hydro Ottawa continues to enjoy a strong financial position. We are well-positioned to achieve continued growth and to yield higher dividends over the 2021–2025 period. All of this will transpire amidst a transformation of our business operations, as we follow through on our commitment to achieve net zero operations by 2030. We look forward to the opportunities ahead for creating greater value for our shareholder and community.



# 6. Governance and Reporting

**Accountability for the effective operation of the Corporation and its subsidiaries rests with an 11-member Board of Directors, which provides direction to the Corporation on behalf of the shareholder, the City of Ottawa. The Board provides leadership for the company within a framework of effective controls that enables risks to be assessed and managed, and is responsible for overseeing the management of the business and affairs of the company and its subsidiaries.**

In carrying out its oversight function, the Board of Directors is guided by a Shareholder Declaration issued by Ottawa City Council and revised from time to time.

In 2006, a separate Board of Directors was established to oversee the operations of Hydro Ottawa Limited, in accordance with the Affiliate Relationships Code for Electricity Distributors and Transmitters issued by the Ontario Energy Board. The powers and functions of that Board are set out in a Shareholder Declaration issued by the Hydro Ottawa Holding Inc. Board of Directors.

On a day-to-day basis, the Corporation is led by an Executive Management Team, comprising the Corporation's President and Chief Executive Officer and the senior executives of the subsidiaries and critical functional areas. This team aligns business activity

and practices with the strategy of the Corporation, and drives performance by managing risks and opportunities. The Executive Management Team is accountable to the Corporation's Board of Directors through the President and Chief Executive Officer.

The Board will monitor progress against the Strategic Direction on a quarterly basis, including in relation to ESG performance, and make adjustments as required by changing circumstances. The Corporation will report on progress annually to the shareholder, at the time of the Annual General Meeting. A summary of the Corporation's financial results is provided to the shareholder on a quarterly basis through the City Manager.







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