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A CANADIAN NORTH STAR:

CRAFTING AN ADVANCED ECONOMY APPROACH TO THE SUSTAINABLE DEVELOPMENT GOALS

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INTRODUCTION

Canada enjoys some of the world's highest average living standards. The country is widely admired for its natural beauty and its cities rank among the most livable in the world. Not surprisingly, outside observers look at Canada with admiration and Canadians themselves are proud of their natural riches and the society they have built. But below the surface, Canada, like other countries, faces profound challenges. Many segments of the population face economic and social exclusion. Inequality is creeping upward. And the country's environment faces risks—from depleted fisheries to loss of biodiversity and the effects of climate change, most conspicuously in the Arctic.

At the same time, forces on the horizon threaten to create new challenges and compound existing ones. Large numbers of jobs are at risk of disruption from technological change. Fewer than half of Canadians are estimated to have trust in public institutions (Edelman, 2018). Canada is also challenged outside its borders. As a middle-sized open economy, the country is deeply invested in the postwar norms of international cooperation. But the rules of the international order are in flux, and protectionist forces are on the rise. Canada cannot be complacent. It needs to update its approaches to confront intersecting challenges at home and abroad.

Canada is not the only country grappling with these domestic and international challenges. Quite the opposite: developed and developing economies alike are confronting the need to promote prosperity that is both socially inclusive and environmentally sustainable. It is the common nature of these issues that led all 193 U.N. member states in 2015 to adopt the Sustainable Development Goals (SDGs) as universal objectives for 2030.

But advanced economies such as Canada are unaccustomed to tracking their progress against comprehensive international benchmarks like the SDGs—let alone organizing policy efforts to achieve them. This paper presents a framework for doing so. Throughout, we aim to present concepts to inform strategies, instead of delving into specific policy details. As part of this, we differentiate between issues to be tackled at home, those to be tackled abroad, and those on which domestic actions contribute to collective global outcomes. Throughout, we emphasize the difference between issues that are currently "on track" for success and those that need a breakthrough. This informs a subsequent distinction between where "business as usual" might be satisfactory and where new approaches are required.

In situations where accelerated progress or breakthroughs are needed, many forms of action tend to be required, spanning business practices, citizen action, public policy, and technical or scientific breakthroughs. In a complex federation like Canada, multiple levels of government need to be engaged, as do indigenous people and communities. Thus any Canadian "national approach" to the SDGs in fact needs to be a constellation of approaches. Each sector in society and each community, province, and territory will need to identify their own priorities for shifting from business-as-usual. And everyone will need to be able to track progress against a common set of outcome measures.

WHY DO THE SDGs MATTER TO CANADA?

In Canada as in other countries, many expert communities and policymakers are already working on—and often making progress against—each of the economic, social, and environmental problems embedded in the SDGs. This is important context when considering the common critique that the goals are an excessive list of topics or commandments decreed by the U.N. The goals are instead best understood as a distillation of what people around the world already care about and have told the global community to care about. In turn, the SDGs are commitments that all governments have made to their own people and hence have a responsibility to deliver.

The SDGs are not perfect. In some areas, for example, the official wording is vague or imprecise. But the fundamentals of the goals help crystallize a common, multidimensional definition of societal success. This multidimensional nature can help specialist communities map how their priorities—ranging from healthy aging to quality jobs to biodiversity to sustainable infrastructure—can interconnect as part of the same agenda. The common reference point allows diverse constituencies to compare approaches, align efforts, and monitor outcomes. It also opens up possibilities for new forms of collaboration, enterprise, and civic action. The SDGs can provide an opportunity to fight joint battles—across business, science, civil society, and all orders of government.

In short, the SDGs offer a tool for putting everyone on the same page, literally and figuratively. This "North Star" function offers the SDGs' greatest opportunity—a common guidepost that everyone can see, regardless of initial vantage point. The 2030 horizon can serve as a guiding light that endures beyond short-term headlines and political cycles. A deadline still a dozen years out is far enough away to offer space for organizing new approaches, yet near enough to rally widespread societal efforts.

In public debates, the goals offer a neutral set of outcome metrics against which everyone can assess progress. Fortunately, Canada signed on to the goals under a government led by one political party and has begun to pursue the goals under a government led by another party. This provides a helpfully nonpartisan political anchor to underpin the necessary national policy debates. In the best cases, a common set of future-oriented aspirations can even expand the political space to break longstanding policy logjams, where the cumulative strains of past arguments might otherwise inhibit progress.

Crucially, the SDGs' focus on "leave no one behind" speaks to the needs of millions of Canadians struggling with poverty and exclusion. The theme is of greatest significance for the challenges faced by many of the country's approximately 1.7 million indigenous people. In this respect, the timing of the SDGs could not be more critical in the wake of the 2015 final report of the Truth and Reconciliation Commission. That body chronicled the history of residential schools in Canada—the decades-long forced removal of indigenous children from their homes, the abuse they suffered and the multigenerational social and economic impacts that resulted. The commission's calls to action seek both to redress past harms and open a new chapter in relations between indigenous and non-indigenous Canadians. The norms and human rights standards embedded in the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) are seen as the framework for reconciliation.

The SDGs can help Canada move forward in this broader effort of reconciliation. The goals' foundation in human rights principles and connections to UNDRIP can provide a common language to facilitate conversations among Canada's diverse indigenous communities and non-indigenous people. Moreover, the principles outlined in the U.N. declaration, combined with the focus on outcomes

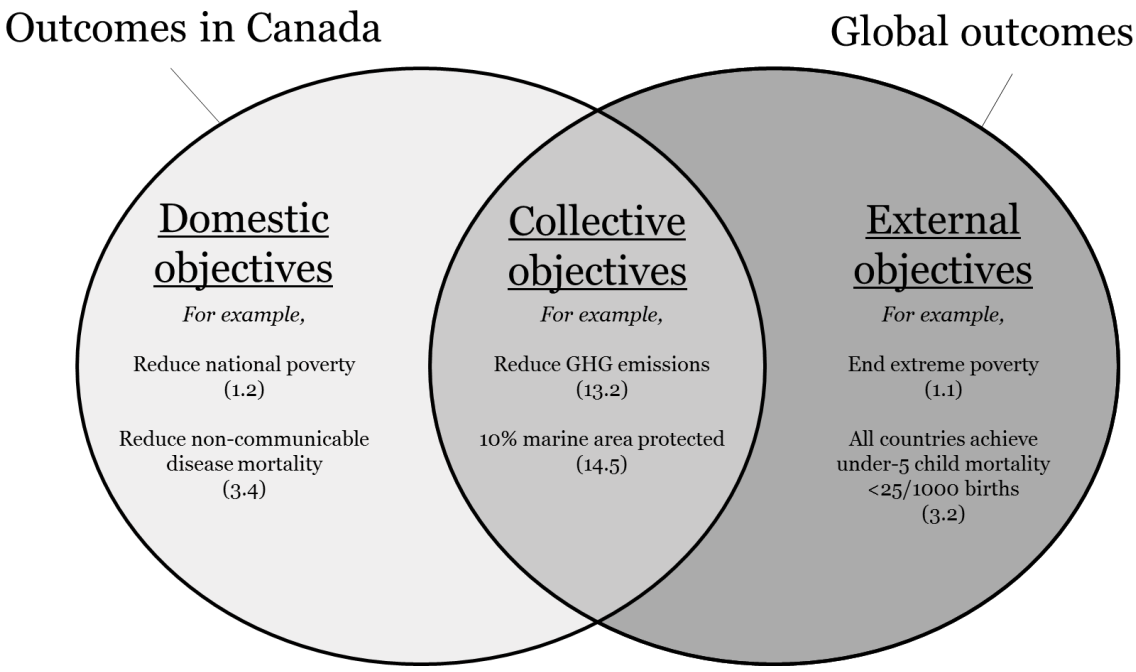
emphasized by the SDGs, can help forge a shared agenda and new mutual accountability framework with federal and provincial governments.

Canada's need to address these and other domestic challenges while helping address global priorities reflects the universal nature of the SDGs. In that regard the goals offer an interface for connecting local and international challenges. To start, Canadians can benchmark their own outcomes against peers on common problems—in other cities, provinces, and countries. This can foster global communities of practice, whereby local experts share and learn with groups working on similar challenges in other parts of the world.

Ultimately, Canada's dedication to tackling all the SDGs will affect the country's standing on the world stage. The goals are becoming a lingua franca of international cooperation both inside and outside of government: major economies such as China, India, and Germany are making high-profile commitments to implementation, and major global associations of scientists, business leaders, and civil society champions are beginning to organize their own actions around the SDGs. To be credible and have influence across a range of geopolitical priorities, Canada needs to model progress on its own internal problems, while carrying an adequate share of the burdens of global problem solving. In the long term, Canada's demonstrated commitment to the goals will foster alliances that can be leveraged on many other geostrategic issues down the road.

Figure 1 presents a schematic diagram to help distinguish between the different types of objectives embedded in the SDGs. The left circle represents outcomes most pertinent within Canada's own geography. The right overlapping circle represents outcomes that are most pertinent at a global scale. On the left, the non-overlapping part represents SDG "domestic objectives." This includes issues like domestic poverty as nationally defined, where SDG target 1.2 calls for every country to cut its domestic poverty rate by half by 2030, or noncommunicable disease, where SDG target 3.4 calls for every country to cut its premature mortality by one-third by the same year. On the right, the non-overlapping part refers to global SDG challenges that will be achieved entirely outside of Canada's geography, even if Canada has a direct interest in seeing the issue succeed. Each country will lead on its own objectives, but in some cases the targets will only be met with international cooperation—for instance, eliminating the most extreme form of dollar-a-day-type poverty (SDG target 1.1) or ensuring child mortality falls below 25 deaths per 1,000 live births in every country (SDG target 3.2). These are standards that Canada has already achieved and where it can help support implementation elsewhere. As one of the world's more advantaged societies, Canada has special responsibility to contribute at least its share toward these external objectives.

Figure 1. Distinguishing between domestic, collective and external objectives



Source: Authors.

The overlapping part of the two circles in the middle represents SDG "collective objectives" across countries, where Canada's domestic actions will contribute directly to global outcomes. For example, global problems defined by externalities—like cross-border tax cooperation, climate change mitigation, or pandemic disease preparedness—drive the need for each country to contribute its part. In addition, the world can only properly protect its maritime areas if all countries protect their maritime areas, especially large countries like Canada with significant coastal zones. In some cases, Canada also still grapples with domestic challenges that other advanced economies consider solely external problems.

In that context, the next section presents an approach for assessing where Canada is on track to meet the SDGs domestically and where there is the greatest need for change. This informs the subsequent section's focus on Canada's contributions to global outcomes.

HOW IS CANADA DOING ON THE SDGs AT HOME?

To consider SDG trajectories within Canada carefully, a first step is to diagnose the issues on which the country is off track, either as a whole or in part—which outcomes, by how much, where, and among whom? Answers to these questions will provide essential evidence about where improvement is needed, at what scale, and at what pace. This information can then inform decisionmaking about where business-as-usual might suffice, and where new approaches are required. The following suggests a basic approach.

Where are breakthroughs needed?

In principle there are two ways to assess a country's status with regard to the SDGs. One is to track relative standing compared to other countries. Another is to compare against absolute standards. Both offer important insights, but from the SDG perspective of "no one left behind," absolute standards are most salient for understanding Canada's SDG challenges. In a country of 36 million people, for example, even achieving 97 percent access to a basic service might rate better than many countries, but it still implies more than 1 million people without access, which is simply too large a number for most Canadians to accept. Even 99 percent still means hundreds of thousands left out. Moreover, peer comparisons are inadequate on absolute global challenges. On greenhouse gas emissions, for example, the standard that ultimately matters is an absolute biophysical one: the global carbon budget consistent with a specific ceiling for global warming.

McArthur and Rasmussen (2017a) present a framework for how to benchmark advanced economies' trajectories against SDG outcome targets. It assesses Canada against both SDG targets framed in absolute global terms—like eliminating hunger, achieving safe drinking water for all, and protecting 10 percent of the ocean—and those framed in relative national terms—like reducing the domestic poverty rate by half, cutting national noncommunicable disease mortality by one-third, or meeting the nationally defined commitment for reducing greenhouse gas emissions. In cases where the formal SDG language is quantitatively vague, the framework assesses trajectories against existing national targets or proxy benchmarks.[1]

The framework classifies each SDG outcome target under one of four categories:

- *On track*: where the target is already achieved or on course for success by the relevant deadline—usually 2030, although 2020 or 2025 in select instances.
- *Acceleration needed*: where the indicator is on course to close at least half the distance to the target, but not yet the whole way.
- *Breakthrough needed*: where the indicator is on course to cover somewhere between 0 to 50 percent of the distance to the target.
- *Moving backward*: where recent trends are moving in the wrong direction.

Conceptually, these classifications emphasize the rate of progress required to succeed more than they do the absolute distance to the finish line. To illustrate, if an indicator for access to an essential service has been stuck at 99 percent for a decade then it rates as "breakthrough needed," even though only a small distance remains to the 100 percent target. Meanwhile, an indicator stuck at only 40 percent coverage would also be deemed in need of a breakthrough. Thus "breakthrough needed" might imply either a systematic gap or last mile challenge of reaching marginalized populations.

Table 1 applies this performance framework to summarize how Canada currently measures up against the SDGs. It assesses sixty-one outcome targets through seventy-three indicators with available data as of mid-2017. (Detailed results for each underlying indicator are available in the appendix.) The Table shows that the country is not yet wholly on track for any SDG, although the right-side column

[1] McArthur and Rasmussen (2017a) includes a detailed description of proxy targets, many of which can be framed by translating nonspecific SDG target wording such as "substantially reduce" into a more measurable "cut by half."

highlights Canada's existing success on many targets and indicators, ranging from eliminating dollar-a-day-type extreme poverty (SDG target 1.1) to reducing child mortality (SDG 3.2) and premature mortality from cardiovascular disease (SDG 3.4). In a less positive vein, more than half the indicators—forty-four in total—are either moving backward or need a breakthrough. Clearly even Canada needs to do better in order to achieve the SDGs.

Table 1. Summary of Canada's domestic status on seventy-three SDG indicators

Sustainable Development Goal	Moving backwards	Breakthrough needed	Acceleration needed	On track
1 Poverty		•	•	•••
2 Hunger & food systems	•••			
3 Good health & well-being	•	••	••••••	•••
4 Quality education	••	•		•••
5 Gender equality	•	•••••		
6 Clean water & sanitation	••	••	•	
7 Affordable & clean energy	•	•	•	•
8 Decent work & economic growth		••	•	•
9 Industry, innovation & infrastructure	•	••		
10 Reduced inequalities	•	•		
11 Sustainable cities & communities	•••			•
12 Responsible consumption & production		•••		
13 Climate action		•		
14 Life below water	•		•	••
15 Life on land		•••		•
16 Peace, justice & strong institutions	••	••	•	••
	18	26	12	17

Source: McArthur and Rasmussen (2017a).

A handful of specific indicators helps to illustrate where Canada has overall challenges. Starting with domestic poverty, although Canada does not have an official poverty line, the share of people living below the low-income cut-off (after tax) dropped only slightly from 10.8 percent in 2005 to 9.2 percent in 2015—not yet fast enough to achieve a 50 percent reduction by 2030. Perhaps surprisingly, Canada is not on track for any of the indicators under SDG 2 (hunger and food systems) or SDG 5 (gender equality), the latter of which includes indicators ranging from pay equity to representation in parliament and reported violence against women. Nor is the country on track for any of the indicators under SDG 6 (clean water and sanitation), SDG 9 (industry, innovation, and infrastructure), SDG 10 (inequality), SDG 12 (responsible consumption and production), and SDG 13 (climate action).

Diving a layer deeper, issues framed under the "acceleration needed" column help prompt questions of where each stakeholder community might need to improve its approaches. For example, on target 14.5 for the protection of oceans and marine-protected areas, the federal government reports that around 5 percent of the country's marine areas were protected as of the end of 2017 (DFO, 2017). This

is a significant increase relative to the previous level of 0.9 percent in 2015, but far shy of a pledge to reach 10 percent by 2020. Meanwhile greenhouse gas emissions are currently on a trajectory to fall only around 8 percent by 2030, if recent policies are fully implemented, compared to a promised 30 percent reduction. Acceleration is also needed to halve traffic deaths by 2020 (target 3.6). On issues like these, subject specialists, stakeholders, and policymakers will need to make concerted efforts to drive faster progress.

But the most fundamental challenges raised in Table 1 are those falling under the left-side columns of "Moving backward" and "Breakthrough needed." These are the issues on which Canada most needs new trajectories—again, due either to society-wide challenges or shortfalls in reaching specific populations. To illustrate the range of issues at stake, Table 2 provides quantitative details for a cross-section of indicators that have been moving in the wrong direction. Examples of systemic challenges include increasing rates of food insecurity, child obesity, and substance abuse, alongside declines in the share of teenagers showing core competencies in numeracy and potentially also in literacy. The latter comes in a context where more than 3 million Canadian adults might already lack crucial literacy skills and 5 million might lack relevant numeracy skills. Meanwhile reported sexual violence against children has been rising, as has the number of unsentenced detainees as a share of the prison population. As of 2014, the most recent year available, aggregate public and private spending on research and development was also declining as a share of GDP, reducing Canada's long-term capacity for innovation. All of these indicators reveal areas where business as usual approaches are clearly not working.

Table 2. Cross-section of indicators "moving backward" in Canada

SDG	Indicator	Initial value	Most recent value	Trajectory for 2030
2.1	**Food insecurity:** not enough money to buy food, some point in last 12 months	9.0% (2007)	9.9% (2016)	11.2%
2.2	**Malnutrition:** children overweight, aged 2-4 (%)	38.4% (2000)	42.3% (2015)	46.2%
3.5	**Substance abuse:** alcohol consumption per capita (liters)	9.8 (2005)	10.3 (2015)	11.1
4.6	**Numeracy:** <2 on PISA in 15-year olds	11% (2006)	14% (2015)	20%
6.1	**Drinking water:** Lacking access to improved water	0.6% (2000)	1.6% (2015)	2.6%
9.5	**Scientific research:** R&D expenditures as share of GDP	2.0% (2004)	1.6% (2014)	1.0%
16.2	**Violence against children:** sexual violations per 100,000 population (police reported)	10.8 (2010)	19.1 (2016)	38.3
16.3	**Justice for all:** Unsentenced detainees as share of prison population	29.0% (2005)	33.8% (2015)	41.0%

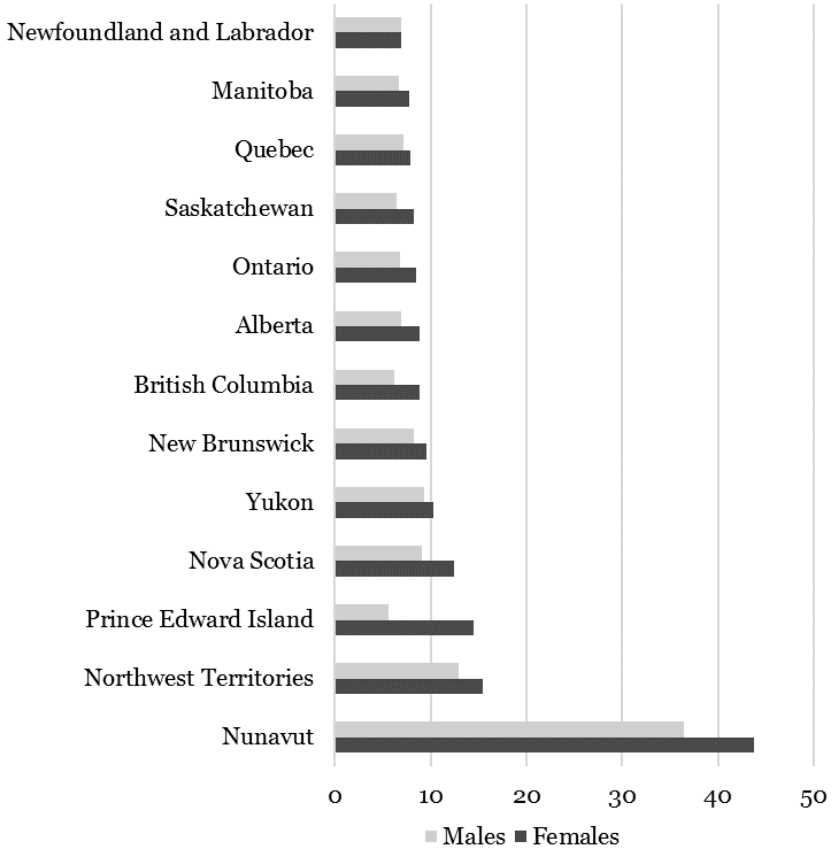
Source: Food insecurity, Graham (2017). Other indicators, McArthur and Rasmussen (2017a).

The importance of unpacking the numbers

Canada is defined by its diversity and vast geography, so each relevant SDG indicator needs to be considered by province, municipality, or community, gender, age, indigenous status, disability status, immigration status, and so forth. On many indicators, some groups in Canada are on track while others are falling behind (see McArthur and Rasmussen, 2017a, for details). On the positive side of the ledger, for example, all 10 provinces and three territories are currently on track to achieve a one-third reduction in the major cardiovascular disease mortality rate by 2030, a key part of SDG target 3.4 on noncommunicable diseases.

Other indicators point to more fundamental challenges. Figure 2, for example, shows gender-disaggregated information on food insecurity across Canada's ten provinces and three territories as of 2011–12, the most recent year with relevant available information. Two aspects of the data stand out. One is that women register higher estimated food insecurity than men in almost all regions. Another is that food insecurity is by far highest in Nunavut, a northern territory with a population of around 36,000 people, the large majority of whom are indigenous. The next highest measure of food insecurity is in the Northwest Territories, where more than half of the population of around 42,000 people are also indigenous.

Figure 2. Moderate and severe food insecurity, by gender and geography, 2011-12 (percent)



Source: McArthur and Rasmussen (2017a), based on StatsCan CANSIM 105-0547.

This offers a window into the much larger challenge of inequities and historical injustice faced by many of Canada's indigenous people, as referenced earlier. For instance, estimated rates of child poverty, food insecurity, and violence against women are more than twice as high among Canada's indigenous compared to non-indigenous people. Indigenous people also have considerably lower life expectancy and average measures of access to essential health services and learning outcomes, in addition to lower confidence in the justice system and courts.[2] Even on access to drinking water (SDG target 6.1), Canada is off track on universal access (see tables 1 and 2), largely because more than ninety First Nations communities remain subject to long-term drinking water advisories as of early 2018 (Indigenous and Northern Affairs Canada, 2018). Against this backdrop, one sine qua non measure of Canadian progress on the SDGs will be whether indigenous people's outcomes can be dramatically improved across the board.

Identifying priorities for new approaches

When considering how best to pursue the SDGs domestically, decisionmakers in Canada (and likewise other countries) need to resist false choices among individual goals. The operative question is not whether any single goal is more important than another. One citizen's problem of food insecurity, for example, is not more or less important than another citizen's problem of domestic violence. The key question is which issues are on track for success and which require better trajectories. Priorities should not be identified by pitting goals against each other in terms of importance, but instead by pitting trajectories against each other—to identify where business-as-usual most needs change.

Fortunately, an advanced economy like Canada clearly has the bandwidth to tackle the entire SDG agenda. Each target already falls within the explicit mandate of at least one ministry. The Canadian federal cabinet, for example, had 31 members as of the beginning of 2018, and provincial government cabinets commonly have twenty to 30 members or more. In the simplest logic, it is not too complicated for every minister to have responsibility for her or his own goal. Of course, in the Canadian context, issues might well touch on multiple officials' responsibilities, spanning multiple levels of government. Health outcomes, for example, are a product of everything from food and drug regulation (federal), to health and educational services (provincial, territorial), to urban design and recreational opportunities (local). In these cases, the responsibilities for SDG puzzle pieces all need to connect across jurisdictions.

Nonetheless, governments still need to make choices, especially at the level of top political leaders, who often need to focus on three to five overarching priorities for change. An SDG trend diagnosis can inform assessments of where current approaches are working and where better approaches need to be developed. On some issues, focused improvements are required to accelerate progress. On others, a wholesale renewal in approach might be necessary. The domestic SDG meta-question therefore becomes, on which issues should new approaches be prioritized? Six component questions can help inform that analysis.

[2] Anderson and others (2016) compare a variety of health-related outcomes for indigenous and non-indigenous people in Canada, alongside other countries. McArthur and Rasmussen (2017a) present comparisons for several other SDG-relevant indicators.

- *First, where are breakthroughs needed?* Where are targeted changes required to reach populations persistently excluded, and where are more systemic shifts needed across society? Which people and issues are getting left behind?

- *Second, where could other countries' experiences inform breakthroughs?* Can Canada learn from other countries in areas where they have performed well? Are there case studies to learn from in bending curves toward longer-term progress? A nuanced cross-country analysis can help uncover relevant insights.

- *Third, where will near-term decisions drive outsized long-term effects?* Some policy decisions are inherently long term in nature, lasting for decades or generations. For example, every major piece of public energy or transport infrastructure is likely to last for forty years or more, so long-term effects need to be consistent with medium-term SDG outcomes, and vice versa. Similarly, today's educational systems will shape a generation's labor market opportunities over the course of several decades to come. Policies need to consider multiple decades when evaluating trade-offs.

- *Fourth, where are innovations required, because current approaches won't solve the problem?* Some problems require profound science-based disruption, new market-based systems, or new policy approaches. The challenge of decarbonizing economies, for example, will not be achieved with existing technologies. In a different vein, the national challenge of ensuring safe drinking water for First Nations reserves has persisted for many, many years, due to deep institutional issues rather than a lack of technology. In the broadest sense of the term, innovation is essential in both situations.

- *Fifth, what actions could have big multiplier effects across issues, positive or negative?* Progress will ultimately be interconnected across the SDGs—few goals can be achieved without mutually supportive progress on others. It might be that early advances on one issue lead to faster subsequent progress on another. Quick wins might also be possible, either within or across issue domains, such that rapid deployment of known interventions could help generate broader policy momentum and public understanding. Any of these scenarios would imply a need for strategic sequencing.

- *Sixth, where are current trajectories most at risk of disruption?* Some issues, like artificial intelligence and extreme weather events, present a possibility of rapid shifts to existing norms and trends. Resilience strategies need to anticipate emergent risks. Educational systems need to foster technologically relevant skills across the working lifecycle, for example. Likewise, cities and ecosystems need investments to adapt to changes in the physical environment.

Applying these questions to a quantitative assessment of domestic trajectories can help Canadian decisionmakers hone in on priorities for change. A strength of this framework is that it can be applied at any scale—by all levels of government and equally across business, civil society, or the scientific community—and equally by actors in other countries.

HOW BEST TO SUPPORT THE SDGs GLOBALLY?

Whereas all countries have a domestic duty to ensure, as a guiding principle, that all of their citizens and communities can achieve all the SDGs, a country such as Canada needs to make strategic choices on external issues. The country represents only 0.5 percent of total world population, 2.2 percent of world income, and 3.7 percent of OECD donor country annual income, so it cannot solve all the world's problems on its own. Instead Canada needs to consider where global needs are greatest and then decide how its resources and comparative advantage can be deployed to best effect. Here we present a logic to guide those questions.

Where are global breakthroughs needed?

The U.N. (2017) provides the most comprehensive update on global SDG trends to date. However, no single consolidated assessment has yet been published to map 2030 SDG trajectories or to identify which issues might need "breakthroughs" or "acceleration". Nonetheless, a basic assessment offers a sense of where the world is off track for achieving SDG success.

Among external objectives, the first among equals is to end extreme poverty by 2030. Recent estimates suggest that the number of people living in extreme poverty is on course to decline from around 630 million people as of early 2018 to around 440 million by 2030 (World Data Lab, 2018). By that time, under business-as-usual, more than half the people in extreme poverty will be concentrated in just six sub-Saharan countries, most prominently Nigeria.[3] In these and other geographies, the challenge of ending extreme poverty will be deeply interconnected with the challenge of promoting sound institutions and mitigating political fragility and conflict.

Shortfalls are also projected for universal access to basic needs. For instance, the number of people living with food insecurity in developing countries has recently been stuck at more than 800 million people. Dozens of countries are off track for meeting the targets for universal access to safe drinking water, sanitation, child mortality, maternal mortality, and even primary school completion by 2030.[4] Distressingly from the vantage point of gender equality and broader development outcomes, around 130 million girls and young women are still out of school, a number not on track to shrink to anywhere near zero by 2030 (UNESCO, 2016).

Among the world's collective objectives, greenhouse gas emissions (GHG) were still growing as of 2017, en route to increase by another 10 to 20 percent by 2030 (UNEP, 2017). However, to meet the Paris Agreement, the world needs to *decrease* GHGs by nearly 20 percent by 2030 (UNEP, 2017). Meanwhile only 3.6 percent of the world's oceans are estimated to be protected as of early 2018 (Marine Conservation Institute, 2018). This is far short of the SDGs' 10 percent protection target for 2020 and a growing scientific consensus around the need to protect half the ocean.[5] There are also now 500 oxygen-free dead zones linked to fertilizer run-off, especially in fast-growing economies

[3] On current trajectories, Nigeria will have the largest estimated number of people in extreme poverty in 2030, at approximately 100 million. The countries with the next five largest estimated numbers are Democratic Republic of the Congo (around 60 million), Madagascar (22 million), South Sudan (14 million), South Africa (14 million), and Mozambique (13 million).

[4] See FAO and others (2017); McArthur and Rasmussen (2016); McArthur, Rasmussen, and Yamey (2018).

[5] See chapter 11 by Sala and Rechberger in the forthcoming book, *From Summits to Solutions: Innovations in Implementing the Sustainable Development Goals*.

(Breitburg and others, 2018). Some scientists are warning of "planetary boundaries" being crossed (Steffen and others, 2015).

At the same time, the changing nature of the global economy is transforming the nature of global challenges. Perhaps most prominently, many fast-growing economies require urgent investments in energy, transport, and housing in order to underpin their own inclusive prosperity (UNIDO, 2014; Schmidt-Traub, 2015). But the most affordable investments often have high carbon intensity, so countries like Canada need to find ways to support other countries' sustainable infrastructure through both public and private investment tools.

Emerging threats lurk across the global horizon too. Fast-spreading pandemic disease, for example, presents a growing risk, as do antimicrobial resistance and noncommunicable diseases. Political systems are at risk of disruption everywhere too, as digital technologies are increasingly deployed both to expand and inhibit civil society efforts around the world.[6]

It is no small task, therefore, for Canada to contribute to the new global agenda, and many societal ingredients need strengthening (Biggs and others, 2015). Nonetheless, Canada has many strengths to tap—from its democratic institutions and civil society, to its high average level of education, to its extensive scientific capabilities, and beyond. The rest of the world also sees Canada as one of the most trusted and positive forces in the world (Ipsos, 2017; Edelman, 2018). The country therefore needs to be as strategic as possible in leveraging its assets in service of addressing shared global challenges.

Identifying priorities for new approaches

We suggest seven questions that can help Canada—or other countries in similar situations—assess strategic opportunities to fulfill global responsibilities. We start with questions most relevant to collective objectives:

First, where do domestic actions disproportionately affect global outcomes? For example, Canada has 17 percent of the world's maritime coastline, 4 percent of all countries' national maritime areas, and 9 percent of all forests, so any domestic action it takes in these realms—irrespective of other countries' choices—will have disproportionate consequences in determining global outcomes. On SDG target 14.5, for example, to conserve at least 10 percent of coastal and marine areas by 2020, Canada is among the world's top seven countries in terms of national marine area that needs to be protected.[7]

Second, where are "fair share" commitments most crucial? On which issues do the country's contributions per capita simply need to align—for political, strategic, or moral reasons—with its share of the collective solution? Here the underlying issues are to ensure international political legitimacy and avoid the costs of being dubbed a free-rider. Climate change and GHG emissions frame a classic example, whereby each country needs to show its own long-term pathway to decarbonize each unit of economic output by at least 90 percent by 2050. If Canada meets its own target for 2030, this will account for 2.4 percent of the global objective—arguably a modest share in overall global terms but an essential share in light of the "swing voter" role that Canada has recently played in galvanizing global coalitions for climate action (McArthur, 2016).

[6] See chapter 13 by Sriskandarajah in the forthcoming book, *From Summits to Solutions: Innovations in Implementing the Sustainable Development Goals*. Also available at https://t.co/LRf5jgBat5.
[7] Countries like the United States and France with distant island territories have larger absolute marine areas.

Third, where do collective outcomes disproportionately affect domestic interests? For instance, as a modest-sized open economy with significant dependence on trade, Canada is considerably affected by any risks or changes to the rules-based, multilateral trading system, and likewise to changes in international banking regulations that might affect the rules for cross-border private finance. Canada always needs to prioritize contributions to such essential global systems.

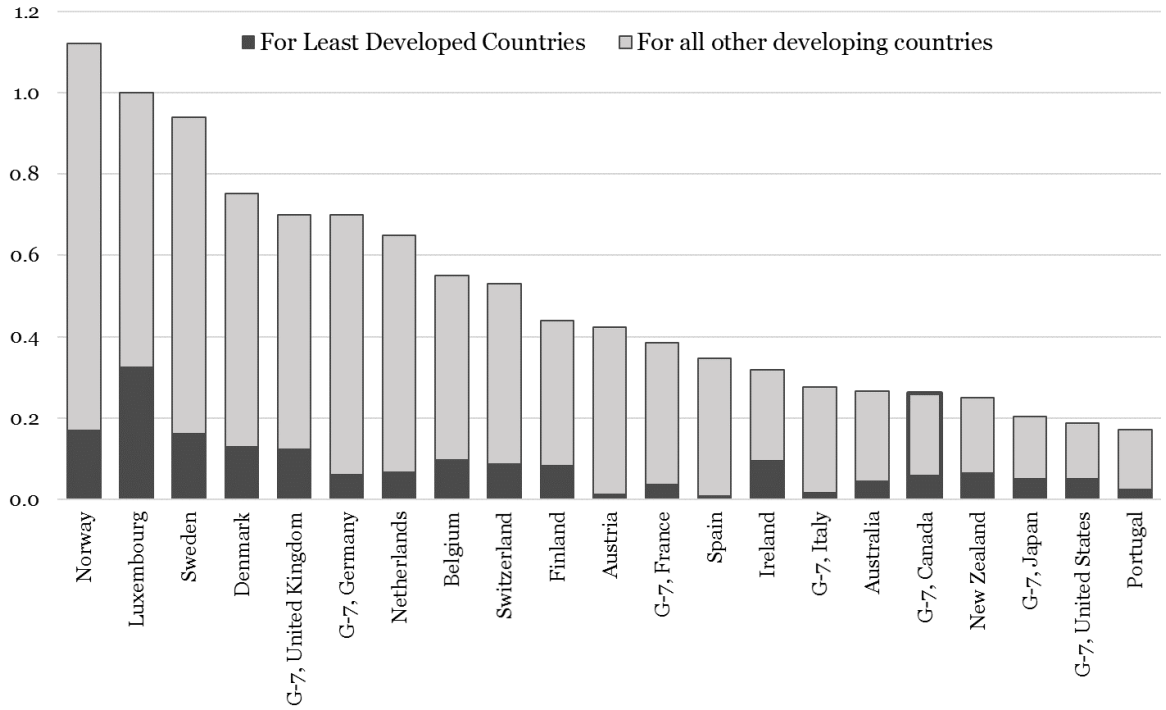
Turning to external objectives:

Fourth, where do external outcomes disproportionately affect domestic interests? On some issues Canada simply has a vested interest in promoting other countries' sustainable development. For example, the SARS and Ebola crises vividly displayed how strong health systems in all corners of the world have direct consequences for Canadian communities. In parallel, Canada has strong interests in promoting prosperity and stability in places that might otherwise harbor conflict and sources of geopolitical volatility. These issues always merit strong strategic investment.

Fifth, where could national assets make distinctive global contributions? Are there areas where the country has distinctive expertise or political leadership with the potential to make disproportionate global contributions? For example, Canada has uncommon technical expertise in natural resource management, including regulatory frameworks, governance, and technologies. Many citizens and public leaders have also developed unique global political capital by emphasizing refugee settlement and gender equality as priorities for concerted domestic and international action. An additional benefit here is that, when properly managed, earned political influence in areas of comparative advantage can translate to substantial agenda-setting influence across multilateral policy forums.

Sixth, what is an objective standard of burden sharing? Depending on the nature of the issues at hand, Canada can compare its burden-sharing contributions against objective benchmarks. One measure is to compare investments relative to the country's share of OECD donor-country income (as a measure for humanitarian and development issues). As one reference point, Canada's contributions to grant-based multilateral finance are roughly equivalent to its share of donor-country income (McArthur and Rasmussen, 2017b). Contributions can also be measured relative to capacity to contribute, such as the internationally affirmed benchmark of 0.7 percent of gross national income (GNI) for official development assistance (ODA) to developing countries, and 0.15 to 0.2 percent of GNI for ODA targeted to the least developed countries. On these measures Canada is trailing well behind its peers, as indicated in Figure 3, and also well behind its own historical trends (Greenhill and Wadhera, 2017). Figure 3 highlights how Canada compares to other G-7 countries in particular.

Figure 3. Official Development Assistance as share of Gross National Income, 2016 (Percent GNI)



Source: Authors' calculations using OECD (2018a, 2018b).

Seventh, what issues remain unaddressed or loom on the horizon? Policymakers need to review the global landscape constantly: are there major problems, either known or newly emerging, that simply are not being adequately addressed? For instance, antibiotic resistance might need anticipatory systems for surveillance, prevention, and rapid response. Meanwhile, secondary education for girls has long been understood as a high impact investment for societies as a whole, but huge global resource gaps persist (Summers, 1992; Sperling and Winthrop, 2016).

All seven of the above questions need to be constantly revisited, especially as new issues and actors evolve on the global stage. In some instances, Canada might have an outsized comparative advantage to step up in moments when another country steps back, and vice versa. For example, the current government has prioritized issues of sexual and reproductive health when other countries expressed reservations. In other instances, such as the recent Ebola crisis, Canada was able to play a leading role in the rapid development of a vaccine. Global issues need to be constantly reassessed in terms of where progress is lagging, where leadership is required, and which resources Canada can best bring to bear.

MOVING TO ACTION

We have seen how the SDGs can be used to identify where Canada needs to accelerate progress and achieve major breakthroughs. We have seen how Canadians can determine where best to target efforts to address critical collective and external challenges. Now we turn to questions of action. How can Canada best fulfill its SDG commitments—at home, to the world, and on collective challenges?

Part of the answer will be driven by official processes. As a signatory to Agenda 2030, the government of Canada has committed to formal international reporting and peer review on its progress. This will need to include some form of "voluntary national review" presented to the UN's High-Level Political Forum in mid-2018, and public indicators will need to be tracked all the way up to the 2030 deadline. But Canada's complex federal structure makes it difficult to forge top-down national strategies, and it would be politically fraught to try to do so. Unlike many of its European peers, including federations like Germany, Canada does not have a history of national planning, nor does it have a track record of integrating sustainable development priorities into national policy frameworks.

Fortunately, there are advantages in being a decentralized federation, unencumbered by entrenched policy processes for sustainable development. A lack of structures can allow leap-frogging into new forms of problem solving. Moreover, Canada's foremost SDG challenges are too complex to be addressed by any single actor, sector, or action plan. Domestic issues like childhood obesity and collective issues like greenhouse gas emissions require innovation across public, private, and scientific sectors, alongside strong community-level mobilization. Meanwhile, external challenges like ending extreme poverty and promoting sustainable infrastructure in emerging markets will require leadership from the federal government, backed by strong academic, civil society, and private sector champions.

Toward a "whole of Canada approach"

As noted above, to achieve the breakthroughs and accelerations required for SDG success, Canada will need many actors to adopt new roles, new actors to be brought into problem-solving processes, and new ways of working together to find solutions and accelerate progress. This will hinge on active experimentation and engagement between scientists, companies, indigenous communities, civic leaders, and people from all walks of life. Amid the complexity, a few key ingredients can help guide new approaches:

A consistent focus on 2030 outcomes. All major Canadian actors can agree to assess societal success against domestic, collective, and external SDG targets.

A commitment to measurement and reporting. All major actors—government, the private sector scientific communities, and civil society—can commit to regular public reports and databases that inform learning and decisionmaking across Canada's diverse constituencies.

Locally defined targets. On issues where the official SDG language is unclear, federal, provincial, territorial, and community leaders can coordinate relevant stakeholders to establish specific 2030 outcomes objectives.

Shared scorecards. Provinces, cities, universities, and industry associations can each agree to track progress among peer entities on a common set of indicators out to 2030.

Sustained public spotlights. The SDGs will matter in Canada once enough people believe they matter; leaders in politics, business, and civil society can all use their public platforms to draw consistent attention to the goals.

Against that backdrop, here we describe some key ways in which different actors can help spur needed SDG progress across Canada.

Indigenous people and communities: Front and center

As already mentioned, a cornerstone for Canada's SDG success will be to ensure the engagement and leadership of indigenous people and communities, and for indigenous community outcomes to improve dramatically across a wide range of indicators—from access to clean water, to child health, to productive employment, and more. While increased investments are no doubt part of the answer, these need to be anchored in broader reconciliation efforts that ensure indigenous people are leading the development and implementation of their own plans on issues that affect them and their communities. Although it is early days, there are signs the SDGs are in fact already providing much-needed common ground for a new relationship between First Nations and government (AFN and GoC, 2017), something that could be sustained and replicated with all indigenous communities.

Federal government: Leader, convener, and catalyst

The government of Canada has a unique responsibility to help drive the national SDG enterprise forward, playing an instrumental role in setting the conditions for societal breakthroughs. To start, the federal government can lead by example in embracing and articulating the SDG framework and 2030 outcomes as guideposts for federal policymaking—as baseline standards, as a platform for reporting, and as a basis for building coherence across the federal portfolio. The country's political leadership has a particularly special role to play in helping to set reference points for public debate. The "federal throne speech," for example, is the government's foremost agenda-setting policy statement. On each delivery through to 2030, the speech could include specific forthcoming priorities for domestic, collective, and external SDG breakthroughs, followed by annual updates on progress.

More broadly, the federal government can be the "systems architect" that leads by example and facilitates the connectivity and capacities of other societal actors. Among other responsibilities, this includes taking a lead in incorporating the SDGs into the broader agenda of reconciliation with indigenous peoples and communities in Canada. All of this will require new mindsets and roles in order to nurture, but not control, innovative networks. It will also call for regulatory, legal, and administrative improvements to enable new partnerships to form, for example, between private foundations, civil society organizations, and the private sector. Below we outline some pillars for this multidimensional government role.

Harnessing the whole-of-government. The SDGs offer an opportunity for the government of Canada to break down silos—across ministries and between domestic and external policies—while stressing the collective global challenges that overlap. On the external side, an important step could be a first ever, whole-of-government strategy for mobilizing Canadians' external and collective commitments to tackle clear global SDG gaps. This would require an initial objective assessment of global trends and shortfalls. It should then include an assessment of Canada's comparative advantages in tackling the same gaps, followed by an objective evaluation of the burden-sharing responsibilities to fill those gaps,

relative to objective benchmarks like Canada's share of OECD donor countries' total annual income. Most important, a coherent external strategy would need to incorporate multiple policy domains such as health, environment, trade, public finance, and private finance—including market and institutional investors.

Similarly, the SDG framework can be used to forge connections on domestic priorities. For example, the goals of halving poverty and reducing inequality on the one hand, and promoting sustainable growth and productive work on the other, require economic and social ministries to collaborate on inclusive growth strategies. Status of Women Canada, the federal ministry, will need to be engaged across the board to advance gender-equal outcomes on all issues.

Integrating strategies. The existing Federal Sustainable Development Strategy (FSDS) on environmental issues (ECCC, 2016) offers a potential entry point for a broader federal government approach. It has been driven by the Department of Environment and Climate Change and has many excellent attributes, including some targets aligned with global SDG standards, some nationally defined targets, and some targets aligned with highly localized environmental problems. It also commits to being a living document to be updated on an ongoing basis as new policy learning takes shape.

The FSDS's environmental approach could be expanded across the Canadian government's vast policy realms to integrate the economic prosperity and social inclusion dimensions of the SDGs. It could develop an overall framework that is SDG consistent and tied to a full suite of SDG outcome metrics and reporting regimes. Ideally it could also identify which policy issues are mutually reinforcing and where they are in conflict (ICSU, 2017), providing an objective basis for government and public debate on how to optimize the interactions.

An augmented FSDS could further build on the Advisory Council on Economic Growth's recommended up-front criteria for government action, by proposing a three-part test for assessing any policy initiative's contribution to the SDGs. That is, (i) will the initiative move the relevant SDG needle; (ii) will its benefits persist; and (iii) will it leave no one behind?[8] This would provide a framework to evaluate, during the design phase, major federal interventions like infrastructure investments, tax policy, and innovation policy. It could also help guide public sector procurement and thereby help align a large share of the country's market supply chains to the SDGs.

Building the integrated public SDG database and information platform. If the SDGs are to be adopted as a national outcome framework, then public data systems will play an outsized role. This implies a key role for Statistics Canada to present a unified SDG database, similar to the U.S. portal (sdg.dta.gov), alongside annual reports tracking progress and countdowns by indicator. Fortunately, Canada has tremendous strengths in one of the world's strongest statistical agencies. Wherever feasible, data need to disaggregated by gender, indigenous people, age group, and geography. Ideally, Canadians will be able to track progress not just by province and territory, but also at the community level. With regard to indigenous people and communities, the government will need to bolster information systems while taking into account the principles of ownership, control, access, and

[8] The Advisory Council on Economic Growth recommendations are tested along three dimensions: "will it 'move the needle' on income growth" particularly real, household income; "will it drive economic growth consistently over time," and "will it drive inclusive growth, i.e. not just for the most advantaged?" (ACEG, 2017).

possession (FNIGC, 2018) of information, in order to ensure that indigenous people and communities agree on the approach to the collection of data affecting them.

Spurring innovation on grand challenges. On issues where breakthroughs are required, the federal government can galvanize research, innovation, and local action on two types of grand challenges: those faced uniquely at home and those shared with the rest of the world. Invariably these challenges, such as obesity or sustainable food systems, cut across specialist disciplines. Canada has deep endowments of research and scientific expertise in many areas—global health, renewable energy, water management, and sustainable agriculture, to name just a few. However, prevailing incentive structures and legacy research networks need updating to realign with the cross-disciplinary nature of contemporary global challenges.

There are prototypes to build on. The Canada First Excellence Research Fund invests in research initiatives with the potential for breakthrough discoveries and global leadership. In the United Kingdom, the Global Solutions Challenges Research Fund supports "challenge-led" research on global problems and interdisciplinary research hubs. Meanwhile the multicountry, multipartner Future Earth consortium seeks to promote a new type of science that "links disciplines, knowledge systems and societal partners" in order to achieve the SDGs. One of Future Earth's global hubs is in Montreal, backed by Quebec's universities.

Eliciting community-level inspiration. The federal government can also challenge Canadians directly to find innovative solutions to local and national problems. The Impact Canada Initiative is a step in this direction, beginning with the new Smart Cities Challenge, which is itself all about measuring and reporting outcomes, building new partnerships, finding new solutions to "wicked" problems, and dispersing results across Canada. What this kind of initiative needs, however, is an outcome framework directly linked to the SDGs—to provide coherence across the various activities, a consistent set of benchmarks, and a platform for sharing results across the country and with the global community. At a practical level, this will require a creative focus on things like convening Canadians from across the country and around the world to facilitate and jump-start problem solving, as well as to foster world-class expertise within government and in relevant nodes across the country.

Tasking accountability. At an operational level, the federal government will need to define how ministers and departments take responsibility, both individually and jointly, for SDG-focused strategies at home and abroad, especially where new approaches are needed. Other peer countries are pursuing a wide range of organizational models. Some are quite centralized (for example, coordination in Germany takes place in the office of the chancellor, and in Colombia at the level of the prime minister), others more disaggregated (in Norway each minister is assigned lead responsibility for a SDG), and others a mix (in Italy, the environment and foreign ministers share the lead).

In Ottawa, there would ideally be multiple ministerial SDG champions, with departments mandated by the prime minister to work collectively and with a diverse range of stakeholders. The federal cabinet could review progress periodically, either on a rolling basis by issue or on a collective basis perhaps once or twice per year. Parliament could also pass legislation requiring annual federal SDG updates on domestic, collective, and external SDG targets through to 2030. Meanwhile, opposition critics should feel encouraged to use the SDGs as neutral reference points for promoting government accountability and proposing alternative strategies to achieve the same outcomes.

Provincial and territorial governments: Leaders across the full SDG landscape

Many of Canada's most important SDG decisions will be taken by provincial and territorial government policymakers and regulators. Constitutionally, Canada's provinces are lead actors in numerous policy areas such as education, skills development, health care, road safety, affordable housing, environmental protection, and sustainable infrastructure. They also have primary responsibility for postsecondary education, are important investors in research and development, and act as lead regulators of market exchanges. Canada's three territories have many of the same responsibilities with respect to social services, the administration of justice, and, increasingly, land and natural resource management.

In this respect, the political leadership of each province and territory has a special role to play in setting the terms of SDG debate, including targets and reporting within their areas of responsibility. Provinces and territories will also need to embrace the agenda of reconciliation with indigenous people, as many of them are already doing, and ensure that indigenous communities lead or co-develop approaches aimed at improving the outcomes for their people.

Many of the federally focused recommendations above will apply similarly at this subnational level. For example, each province and territory has its own throne speech tradition, which could be used to articulate SDG priorities, but with emphasis on areas of provincial or territorial responsibility. Each province and territory will also need to establish its own mechanisms for interministry collaboration and its own reporting and accountability measures A number of provinces and territories have already developed long-range sustainability-linked strategies, but most of these were drafted before the launch of the SDGs and require more explicit alignment with the SDGs (McArthur and Rasmussen, 2017a).

Across relevant indicators, provinces and territories could agree to a framework for common annual SDG reports, enabling citizens to track and compare progress between their own provinces and their peers. These reports could be produced in collaboration with civil society, building on partnership efforts like those already developed by local leaders in Alberta and British Columbia. Joint SDG action plans could be discussed at annual meetings of the provincial-territorial Council of the Federation.

Cities and communities: Front-lines for citizen feedback and solutions

Cities are not included in Canada's formal intergovernmental machinery and constitutional division of powers, but the country can only meet its national SDG challenges if municipal actors are centrally involved in the solutions. The official SDG framework highlights the importance of cities and communities in growth, inclusion, and sustainability. This is fitting for Canada, since more than 80 percent of Canadians live in large or medium-sized cities, and more than a third reside in the three metropolitan areas of Toronto, Montreal, and Vancouver alone. Cities are epicenters for jobs, growth, and innovation. They are also the locus for many of Canada's most serious social and environmental challenges—poverty, homelessness, crime, and pollution, to name just a few.

The SDG framework provides an explicit entrée for cities through the articulation of issues like transportation, housing, and waste management embedded under SDG 11 for Sustainable Cities and Communities. But cities play important broader roles across the economic, social, and environmental dimensions of all the other goals too. They often offer the most direct public interface with citizens on the ground. They also have many relationships with peer cities and local governments around the

world, largely unencumbered by state-to-state politics, thus amplifying Canada's ability to form purpose-built alliances for innovation, such as those that have taken shape around climate change.

Through the Federation of Canadian Municipalities (FCM) and global partners, Canada's cities worked hard to ensure that urban issues and local government found pride of place in the SDG agenda. Now they need to integrate the SDGs into their own strategic plans and accountability frameworks.[9] Joint reporting is also crucial for consolidating data and providing context to citizens and municipal decisionmakers. To that end, the FCM could work with its member cities to establish a common suite of SDG-relevant indicators and outcome targets for 2020, 2025, and 2030. These could build on the Canadian Municipal Benchmarking Network's reporting effort (MBNC, 2016), perhaps packaged as an annual "Canadian SDG Cities Report." These could also be informed by the International Institute for Sustainable Development's recently initiated SDG monitoring effort for 13 Canadian cities (Bizikova and Pinter, 2017; Temmer, 2017).

This would enable all Canadians living in municipalities to benchmark their local living standards and rates of progress against comparator communities and, in turn, promote collaboration and peer-learning across regions. Municipal reporting efforts could partner with city-led efforts in other countries, where appropriate. For example, Baltimore, New York, and San Jose have all initiated their own SDG-focused initiatives. Los Angeles Country has partnered with Measure for America to create a local dashboard tracking SDG indicators disaggregated by race and ethnicity. Other cities have collaborated with the Sustainable Development Solutions Network to benchmark status against an integrated index of SDG-relevant measures. Canadian cities and research partners could pursue similar exercises together.

Business: Leading the shift from compliance to performance

The private sector, Canada's central economic driver, creates the vast majority of jobs, accounts for a large share of Canadians' international activities, and profoundly impacts the country's environmental footprint. Absent the crucial drivers of private sector investment, innovation, and public advocacy, SDG efforts will fall short, so market actors need to be part of the SDG solution at every step. At the global level, businesses like Unilever and Aviva have already dedicated considerable attention to the SDGs. In September 2017 the World Economic Forum launched an inaugural Sustainable Development Impact Summit in New York, timed purposely to coincide with major U.N. General Assembly events and aimed at promoting public-private partnerships for the SDGs.

Some major Canadian firms like Agrium (now part of Nutrien) and Suncor have already begun to engage actively and publicly on the goals. They have gone beyond traditional "ESG" (economic, social, and governance) compliance to link explicitly to the SDGs, receiving recognition from the Canadian chapter of the U.N. Global Compact, which has been working to build private sector awareness of the SDGs and promote opportunities for multistakeholder collaboration. Much broader private sector engagement will be needed across industries and different-sized business in order to fulfill the country's promise on the goals. Part of this will hinge on Canadian businesses spotting the self-interest in doing so and aiming to outperform competitors in addressing the SDGs. In 2017 the Business and Sustainable Development Commission (2017) outlined a $12 trillion SDG market opportunity

[9] McArthur and Rasmussen (2017a) examined recent municipal strategies for Calgary, Montreal, Toronto, Vancouver and Winnipeg and found that some have well defined targets but none yet align fully with the SDGs.

embedded in four industry segments alone: food and agriculture; cities and urban mobility; energy and materials; and health and well-being.

The flipside of the business opportunity equation lies in managing the risk of SDG inaction, especially material risks that companies might need to disclose to their investors. These include regulatory risks, market disruptive risks, socioeconomic risks, and the risk of declining social license to operate. Many of these risk issues have already started to arise in the context of climate change, due in part to prominent global voices, including Mark Carney, governor of the Bank of England and chairman of the G-20's Financial Stability Board, and Michael Bloomberg, chair of the Task Force on Climate-Related Financial Disclosures. Risk profiles linked to other SDG-related issues like food security and global health are still being explored.

On the investment side, many of the world's foremost institutional investors are beginning to call for alignment with the SDGs.[10] Canada is home to some of the world's most respected institutions in this domain, including Canada Pension Plan Investment Board, Ontario Teachers' Pension Plan, and La Caisse de dépôt et placement du Québec, all of which have been active in global discussions of sustainability and the need to avoid excess short-termism. Through their public statements and private actions, these major institutions send influential signals to private and public actors around the world. Alberta Investment Management Corporation has already made major public commitments to the SDGs. If all of Canada's major institutional investors can explicitly support SDG-consistent outcomes while ensuring competitive returns for their shareholders—Canadian pensioners—they can play a decisive role in helping to move markets toward the goals.

National SDG business efforts will require a constellation of action, including personal leadership from corporate chief executives, SDG-consistent incentives from policymakers, strong demand for SDG-consistent performance metrics from major investors, and a clear commitment to industry-smart scorecards from industry regulators (Kharas and McArthur, 2016). Consumers, of course, always have a major say in guiding final market demand too. As Jane Nelson (forthcoming) outlines, pre-competitive alliances are required in which industry leaders and independent experts define performance standards for a level competitive field.[11] In Canada an umbrella entity like the Business Council of Canada or the Canadian Chamber of Commerce could help to promote such alliances, partnering with organizations like the World Business Council on Sustainable Development or global industry associations to identify SDG-consistent approaches most pertinent to Canadian business.

To match this private sector action among public sector players, a combination of provincial and federal leadership is required, since, as noted earlier, Canadian securities regulators and other key market oversight bodies are generally structured at the provincial level, while banking regulations are generally governed at the federal level. Much of this will hinge on the establishment of SDG-relevant reporting standards that speak to the industry-specific playing field in which each company competes. Building on initiatives like the World Benchmarking Alliance, the Sustainability Accounting Standards Board, and other relevant bodies, Canada's political leadership could call on provincial regulators to

[10] For example, Temasek, the Singaporean sovereign wealth fund, has strongly signaled its alignment with the SDGs as part of a call for collective action to achieve the goals (see *Temasek Review, 2017*); several major European pension investors have committed to use the SDGs as an investment framework (Rust, 2016); and the California Public Employees' Retirement System (CalPERS) has started to map its investment portfolio to the SDGs to find points of connectivity as an "economic necessity" (Baker, 2017).

[11] See chapter 4 by Jane Nelson in the forthcoming book, *From Summits to Solutions: Innovations in Implementing the Sustainable Development Goals*.

develop, by a target deadline like 2025, a common North American approach to SDG-consistent reporting for each industry. Canada could potentially even play a leadership role to promote alignment between American, Asian and European efforts on private sector SDG reporting.

The launch of Canada's new development finance institution, FinDevCanada, also provides a major opportunity to tie Canadian private businesses to the achievement of SDG-consistent breakthroughs abroad. Part of this will hinge on the new institution publicly measuring its progress against contributions to development outcomes. This could build on evolving practices at the International Finance Corporation, the New Development Bank, and other development finance institutions like the CDC Group (formerly Commonwealth Development Corporation) in the United Kingdom to develop common standards for aligning investment processes with the SDGs.

Universities and colleges: Hubs for intergenerational collaboration

Much of Canada's emerging SDG leadership is being fostered on university and college campuses. Tertiary institutions are explicitly meant to be places where young people learn about the world's challenges and cultivate new approaches to solve them. They are also places where researchers create the insight and innovation that develop tools and fuel new understanding for how to take on those same challenges. In these respects, universities are naturally poised to promote nexus explorations and collaborations across disciplines, sectors, and generations—all of which are essential for achieving the SDGs.

Each Canadian university and college will bring its own strengths to tackling local, national, and international SDG challenges. The Waterloo Global Science Initiative, for example, is convening multidisciplinary and cross-generational efforts to identify solutions to advance the SDGs. Institutions across the country can partner with provincial and federal counterparts to identify SDG targets where breakthroughs are required. Ideally they can also work together on issues of common concern, potentially by collaborating through purpose-built research collaborations or new joint ventures sponsored by the research granting councils. These could be bolstered by developing a common benchmarking framework for tracking progress through to 2030.

Another potential avenue is through the Association of Public and Land Grant Universities (APLU), which convenes institutions from around North America, including Canada and Mexico.[12] Eight major Canadian universities are already part of this association, which has been exploring ways to promote widespread university-level collaboration around the SDGs. Opportunities could include activities focused on developing students' global competencies, conducting relevant research, exchanging scholars and ideas, and operating in a manner consistent with supporting SDG priority outcomes.

Philanthropy and community-level action: Kick-starting collaboration and innovation

Many of Canada's most important innovations for the SDGs will be initiated through either direct community-level work, social entrepreneurship in the private sector, or new efforts that provide proof of concept for the public sector to take up at scale. Philanthropy can play a crucial role in all of these processes, whether focused on domestic, collective, or external objectives. Canada is estimated to have more than 10,000 public and private foundations managing more than C$69 billion in assets and

[12] The Canadian members of APLU are Dalhousie University, Queen's University, University of Alberta, University of British Columbia, University of Calgary, University of Guelph, University of Saskatchewan, and Western University.

allocating roughly C$6 billion in annual giving (PFC, 2017). The MasterCard Foundation, a major and relatively new international entity based in Toronto, is by far the largest of these organizations and could be a major source of learning and insight among other Canadian actors.

The country's local foundations meanwhile play a crucial role in supporting community-level action and innovation. The Community Foundations of Canada (CFC) is a national network of 191 community foundations, which together serve more than 90 percent of Canadian communities and jointly manage more than C$5 billion of assets. CFC has already taken the SDGs on board as a central pillar of its work and is actively collaborating with other community foundation networks in the United States and Mexico. It is taking steps to connect the CFC's own indicators of community resilience—the Vital Signs Framework—to SDG outcomes (Ross, 2018). CFC members could also partner with local universities and industry associations to generate active community-level consultations, reporting, and collaborative problem-solving initiatives across the country. They could expand to include local researchers working alongside the Federation of Canadian Municipalities and the Canadian Municipal Benchmarking Network to develop common indicators for tracking outcomes.

Such cross-country collaborations could naturally feed in to the global work of the SDG Philanthropy Platform, which has established itself as the leading collaborative network to promote partnerships between philanthropic organizations and diverse global public and private SDG stakeholders. As of early 2018 the platform had begun working in eight pilot countries to identify how philanthropy could best contribute to the SDG planning and implementation process, ranging from Brazil to Ghana to India to the United States. With leadership from Canadian community foundations, some major institutional philanthropies, and potentially the federal government, Canada could commit to being a ninth pilot country focused on pioneering new strategies for jointly seeding domestic, collective, and external SDG breakthroughs.

SDG forums: Convening practitioners and problem solvers

We have argued above that Canada's approach to achieving the SDGs cannot be pursued via a single national plan but rather through the concerted efforts of diverse actors, problem solving at all levels—community, national, and international—and new solution-focused partnerships. The impetus and glue for this national enterprise can be the SDGs themselves—as shared goals for benchmarking and regular reporting of actions and outcomes. But the ultimate power will come through human connections—the learning, cooperation, and problem solving generated in an SDG-focused societal ecosystem.

The most innovative partnerships cannot be planned, but environments for creating them can be fostered. There has already been movement in this direction. For example, the Alberta SDG initiative (Wilson, 2016) has convened provincial leaders from business, government, and civil society to advance the SDGs as a common framework for measuring economic, social, and environmental progress across the province, and the Alberta Council for Global Cooperation convened the Together2017 symposium to "set the foundation for how government, business, and civil society can work together to use the SDGs as a framework and common language" (ACGC, 2017). Similar 2030-focused conversations are taking shape in each province and territory, on university and college campuses, and by citizen-led groups across the country.

New forms of partnership are being formed too. For example, the Canadian Council for International Cooperation traditionally focuses on mobilizing civil society efforts to advance global sustainable

development abroad and the Community Foundations of Canada traditionally focuses on the country's local community development. These two organizations are joining forces to advance an integrated national conversation on the SDGs. This is just one powerful example of how the goals are already prompting unexpected forms of partnership among diverse constituencies.

For Canada as a whole, an annual pan-Canadian SDG forum could provide a much-needed focal point for diverse activities across the country, as a venue to draw disparate sectors and regions together. The government of Canada, in keeping with its role as SDG systems architect, could collaborate with partners to convene this annual SDG forum in a different city each year. The forum could adopt a three-pronged approach: advancing each of the 17 SDGs across the country, tackling cross-cutting priorities across issues (for instance, measurement, gender equality), and addressing critical nexus issues that can only be achieved through action on multiple fronts. Each province and municipality could convene similar forums of its own, perhaps feeding into the national forum, which could have opportunities for municipalities, provinces, and territories to showcase their community-level innovations for peer learning.

An annual Canada SDG forum could also expand to include a complementary global SDG forum. Canada has unique convening ability, and its proximity to U.N. headquarters offers distinct geographic advantages. Canada could convene SDG-focused practitioners across all 17 substantive goal areas, while taking a specific interest to help guide multistakeholder progress on its own global priorities. Partner countries could be invited to play a similar role driving progress on issues where they are taking a leadership mantle. Such a convening would not just help ensure Canada's domestic SDG communities are connected to peer leaders from other countries, but could also help foster new bottom-up forms of collaboration on problems of shared global interest.

CONCLUSION

This paper has focused on the nature of opportunity presented by the SDGs for Canada and countries like it. The foremost offering is a shared sense of direction, a North Star around which diverse constituencies can rally collective efforts. Although the notion of global goals originally took hold around ambitions to support the poorest nations, today such goals offer a tool for all nations to do better on issues of common importance. The SDGs offer a remarkably useful shorthand for what matters. As neutral outcome benchmarks, they can help guide societal efforts across a highly diverse and geographically expansive country like Canada.

By assessing trajectories out to 2030—by issue, geography, and segment of the population—Canadians can foster a shared understanding of where current approaches are on track, and where new approaches are needed. The simple exercise of rating all seventeen goals on the same page provides an important tool for identifying shared domestic priorities for change. By doing the same for collective external global challenges, Canada can then map its own strengths against global needs to assess how its global priorities should shift or be amplified.

The final major offering of the SDGs is to prompt new forms of collaboration to find solutions and accelerate progress. While some issues can be addressed through targeted policy changes, many will require systemic innovations that draw from the best of business, science, civil society, and government in concert. In many cases the role of government will be to foster experimentation and

innovation across other sectors. A data-driven outcome framework can inform public debate on which approaches are making the right dent in the relevant problems.

Despite their imperfections, the SDGs represent the best means the world has yet crafted for defining successful societies in which no person or major issue is left behind. If Canadians embrace them as an outcome framework for measuring success—compared to both local benchmarks and global standards—they can help ensure Canada achieves the social, economic, and environmental breakthroughs that it and other countries need most. Done right, Canada can frame a model approach for the world.

REFERENCES

ACEG (Advisory Council on Economic Growth). 2017. "Executive Summary." *The Path to Prosperity*. Ottawa: Department of Finance Canada.

ACGC (Alberta Council for Global Cooperation). 2017. "About Together2017" (www.together2017.ca/about/).

Anderson, Ian, Bridget Robson, Michele Connolly, Fadwa Al-Yaman, and others. 2016. "Indigenous and Tribal Peoples' Health (*The Lancet*-Lowitja Institute Global Collaboration): A Population Study." *The Lancet* 388: 131–57.

AFN and CoC (Assembly of First Nations and the Government of Canada). 2017. A New Approach: Co-development of a New Fiscal Relationship between Canada and First Nations. Ottawa: AFN.

Baker, Sophie. 2017. "Asset Owners Push to Satisfy U.N. Goals." *Pensions & Investments*. October 16 (www.pionline.com/article/20171016/PRINT/171019887/asset-owners-push-to-satisfy-un-goals-esg-institutions-making-major-effort-to-use-investment-acuity-to-make-world-better).

Biggs, Margaret, John W McArthur, Kate Higgins, David Moloney, Julia Sanchez, and Eric Werker. 2015. *Towards 2030: Building Canada's Engagement with Global Sustainable Development*. Ottawa: Centre for International Policy Studies.

Bizikova, Livia, and Laszlo Pinter. 2017. "Cities—The Engines for Implementing the Sustainable Development Goals." International Institute for Sustainable Development Briefing Note, June (www.iisd.org/sites/default/files/publications/cities-the-engine-for-Implementing-sdgs.pdf).

Breitburg, Denise, Lisa A Levin, Andreas Oschlies and others. 2018. "Declining Oxygen in the Global Ocean and Coastal Waters." *Science* 359, no. 6371 (doi: 10.1126/science.aam7240).

Business and Sustainable Development Commission. 2017. *Better Business, Better World*. London.

Edelman. 2018. *2018 Edelman Trust Barometer: Global Report* (http://cms.edelman.com/sites/default/files/2018-01/2018_Edelman_Trust_Barometer_Global_Report_Jan.PDF).

ECCC (Environment and Climate Change Canada). 2016. *Achieving a Sustainable Future: A Federal Sustainable Development Strategy for Canada 2016-2019*. Gatineau, Quebec.

FAO, IFAD, UNICEEF, WFP, and WHO. 2017. *The State of Food Security and Nutrition in the World 2017. Building Resilience for Peace and Food Security*. Rome: FAO.

FNIGC (First Nations Information Governance Centre). 2018. "The First Nations Principles of OCAP®" (http://fnigc.ca/ocap.html).

DFO (Fisheries and Oceans Canada). 2017. "Canada Reaches 5% Marine Conservation Target." Updated as of October 27, 2017 (www.dfo-mpo.gc.ca/oceans/publications/mct-ocm/five-cinq-eng.html).

Graham, Carol. 2017. Mimeo. Brookings calculations based on Gallup World Poll.

Greenhill, Robert, and Celine Wadhera. "Assessing Canada's Global Engagement Gap: Second edition—January 2017." Global Canada.

Indigenous and Northern Affairs Canada. 2018. "Ending Long-Term Drinking Water Advisories in First Nations Communities." Updated as of January 23, 2018 (www.aadnc-aandc.gc.ca/eng/1506514143353/1506514230742).

ICSU (International Council for Science). 2017. *A Guide to SDG Interactions: From Science to Implementation*. Paris.

Ipsos. 2017. "Dangerous World" (www.ipsos.com/sites/default/files/2017-06/Dangerous_World-2017.pdf).

Kharas, Homi, and John W McArthur. 2016. "Links in the Chain of Sustainable Finance: Accelerating Private Investments for the SDGs Including Climate Action." Brookings Global Views No. 5. September. Brookings Institution.

Marine Conservation Institute. 2018. "Atlas of Marine Protection" (http://mpatlas.org/map/mpas/).

McArthur, John W. 2016. "It's Canada's Moment to Seize." *Toronto Star*. August 3.

McArthur, John W., and Krista Rasmussen. 2016. "How Close to Zero? Assessing the World's Extreme Poverty-Related Trajectories for 2030." Brookings Global Views No. 6. November. Brookings Institution.

_____. 2017a. "Who and What Gets Left Behind? Assessing Canada's Domestic Status on the Sustainable Development Goals." Global Economy and Development Working Paper 108. October. Brookings Institution.

_____. 2017b. "Who Funds Which Multilateral Organizations?" Brookings Global Views No. 8. December. Brookings Institution.

McArthur, John W., Krista Rasmussen, and Gavin Yamey. 2018. "How Many Lives at Stake? Assessing 2030 Sustainable Development Goal Trajectories for Maternal and Child Health." *The BMJ* 360: k373

MBNC (Municipal Benchmarking Network Canada). 2016. *2016 MBNCanada Performance Measurement Report*. Dundas, Ontario.

OECD (Organization for Economic Cooperation and Development). 2018a. "Net ODA (indicator)" (doi: 10.1787/33346549-en).

_____. 2018b. "Distribution of Net ODA (indicator)" (doi: 10.1787/2334182b-en).

PFC (Philanthropic Foundations Canada). 2017. *Snapshot of Foundation Giving in 2015*. Montreal.

Ross, Natalie. 2018. *Local Leadership, Global Impact: Community Foundations and the Sustainable Development Goals*. Council of Foundations.

Rust, Susanna. 2016. “Major European Pension Investors Commit to UN Development Goals.” *Investment and Pensions Europe*, September 7 (www.ipe.com/news/esg/major-european-pension-investors-commit-to-un-development-goals/10015051.fullarticle).

Schmidt-Traub, Guido. 2015. “Investment Needs to Achieve the Sustainable Development Goals.” Working Paper. New York: Sustainable Development Solutions Network.

Sperling, Gene, and Rebecca Winthrop. 2016. *What Works in Girls’ Education: Evidence for the World’s Best Investment*. Brookings Institution Press.

Steffen, Will, Katherine Richardson, Johan Rockstrom, Sarah E. Cornell, Ingo Fetzer, and others. 2015. “Planetary Boundaries: Guiding Human Development on a Changing Planet.” *Science* 347 (6223): 1259855.

Summers, Lawrence H. 1992. “Investing in All People: Education Women in Developing Countries.” *Pakistan Development Review* 34, no. 4: 367–404.

Temmer, Jennifer. 2017. “Tracking the SDGs in Canadian Cities: SDG 1.” Briefing Note, October. International Institute for Sustainable Development.

United Nations. 2017. *Progress towards the Sustainable Development Goals: Report of the Secretary-General.* E/2017/66 New York.

UNESCO (United Nations Educational, Scientific, and Cultural Organization). 2016. “Leaving No One Behind: How Far on the Way to Universal Primary and Secondary Education.” Policy paper 27 / Fact sheet 37. July. Paris.

UNEP (United Nations Environment Program). 2017. *The Emissions Gap Report 2017.* Nairobi.

UNIDO (United Nations Industrial Development Organization). 2014. *World Investment Report 2014. Investing in the SDGs: An Action Plan.* Vienna.

Wilson, Mel. 2016. “The Alberta SDG Initiative.” September 24 (www.linkedin.com/pulse/alberta-sdg-initiative-mel-wilson).

World Data Lab. 2018. “World Poverty Clock” (http://worldpoverty.io/).

APPENDIX 1.

Assessment of Canada's status on domestic SDG targets

	Target	Proxy target	Indicator used	Moving backwards	Breakthrough needed	Acceleration needed	On track
1.1	End extreme poverty		Share in extreme poverty				●
1.2	Reduce national poverty by 50%		Share in low income - low income cut-offs			●	
			Share in low income - market basket measure		●		
1.3	Implement social protection		Share of poor covered by social protection				●
1.5	Build resiliency of poor to climate-events	P	Mortality rate from disasters				●
2.1	End hunger/food insecurity		Moderate + severe food insecurity	●			
2.2	End malnutrition		Children overweight, aged 2-4	●			
2.4	Ensure sustainable food production systems	P	Nutrient balance - nitrogen, kg/ha	●			
3.1	Maternal mortality < 70 per 100,000 births		Maternal mortality ratio				●
3.2	Child and newborn mortality (< 25 & < 12 per 1,000 births)		Neonatal mortality rate				●
3.3	End AIDS/TB/Malaria epidemics		TB incidence rate		●		
3.4	Reduce premature mortality from non-communicable diseases (NCDs) by 1/3		Mortality rate attributed to NCDs			●	
			Cancer mortality rate			●	
			Major cardiovascular disease mortality rate				●
			Suicide mortality rate		●		
3.5	Strengthen prevention/treatment of substance abuse	P	Annual alcohol per capita consumption	●			
3.6	Halve traffic deaths by 2020		Mortality rate due to road injuries			●	
3.7	Universal access to sexual & reproductive services		Women with family planning needs satisfied			●	
3.8	Universal health coverage (UHC)		Population with coverage of 7 UHC tracer interventions			●	
3.9	Reduce deaths due to pollution & chemicals	P	Mortality rate from household/ambient air pollution			●	
4.1	Ensure all complete primary/secondary education		Upper-secondary graduation rate				●
4.2	Universal access to early childhood education		Early childhood education net enrollment				●
4.5	Eliminate gender disparities in education		Gender differences in mean reading PISA scores		●		
			Gender differences in mean math PISA scores				●
4.6	Achieve literacy and numeracy		Literacy: 2+ on PISA in 15-year olds	●			
			Numeracy: 2+ on PISA in 15-year olds	●			
5.1	End discrimination against all women/girls		Gender wage gap in full-time employees		●		
5.2	Eliminate violence against women/girls		Women experiencing intimate partner violence		●		
			Female victims of police-reported violent crime	●			
5.3	Eliminate harmful practices such as child, early and forced marriage and female genital mutilation		Share of 15-17 year old females who are married		●		
5.4	Recognize and value unpaid care and domestic work	P	Gender disparity in hours of unpaid work		●		
5.5	Ensure women's full participation in leadership	P	Share of seats held by women in national parliament		●		

Notes: "P" = uses proxy target; "N" = uses Canadian National target

Assessment of Canada's status on domestic SDG targets (cont.)

	Target	Proxy target	Indicator used	Moving backwards	Breakthrough needed	Acceleration needed	On track
6.1	Universal access to safe drinking water		Access to improved water	●			
6.2	Access to adequate and equitable sanitation for all		Access to sanitation facilities		●		
6.3	Improve water quality and halve untreated wastewater		Wastewater treated	●			
		p	Freshwater sites rated good or excellent			●	
6.4	Increase water-use efficiency	P	Annual freshwater withdrawals		●		
7.1	Universal access to modern energy services		Access to electricity				●
7.2	Increase share of renewable energy	P	Renewable electricity consumption	●			
		N	Electricity generated from renewable & non-emitting sources			●	
7.3	Double global rate of improvement in energy efficiency		Energy intensity level of primary energy		●		
8.4	Improve resource efficiency in consumption & production	P	Domestic material consumption per unit of GDP			●	
8.6	Reduce share of youth not in employment, education, or training by 2020	P	Youth not in education or employed (age 15-29)		●		
8.8	Protect labor rights, promote safe working environments	P	All-cause DALY rate attributable to occupational risks		●		
8.10	Strengthen capacity of domestic financial institutions to expand access to banking for all	P	Share of adults with account at bank, financial institution, or mobile money				●
9.4	Upgrade infrastructure & retrofit industry to make sustainable	N/P	Emissions of CO_2 per unit of GDP PPP		●		
9.5	Enhance scientific research & increase no. of R&D workers & public-private R&D spending	P	R&D expenditures as share of GDP	●			
			Full-time researchers per million inhabitants		●		
10.1	Achieve and sustain income growth of bottom 40% higher than national average		Palma Ratio	●			
10.4	Progressively achieve greater equality	P	Gini coefficient, adjusted after-tax income		●		
11.1	Access to adequate, safe & affordable housing for all		Households spending 30%+ of income on shelter	●			
11.5	Decrease deaths & economic loss from disasters	P	Cost from natural disasters, share of GDP	●			
11.6	Reduce adverse per capita environmental impact of cities	P	PM2.5 annual average concentration				●
11.7	Universal access to safe, inclusive green and public spaces	P	Share with park or green space < 10 minutes from home	●			
12.3	Halve per capita food waste		Food waste		●		
12.5	Reduce waste generation through prevention, reduction, recycling	P	Solid waste diversion rate		●		
		P	Solid waste per capita		●		

Notes: "P" = uses proxy target; "N" = uses Canadian National target

Assessment of Canada's status on domestic SDG targets (cont.)

	Target	Proxy target	Indicator used	Moving backwards	Breakthrough needed	Acceleration needed	On track
13.2	Integrate climate change measures into nat. policy	N	GHG emissions total		●		
14.1	Prevent and reduce marine pollution		Volume of spills detected				●
			Number of spills detected	●			
14.4	Regulate harvesting & end overfishing by 2020		Major fish stocks harvested above approved levels				●
14.5	Conserve at least 10% of coastal and marine areas by 2020		Share of marine area protected			●	
15.1	Ensure conservation of terrestrial and inland ecosystems by 2020	N	Share of terrestrial area protected		●		
15.2	Sustainably manage forests by 2020	N	Volume wood harvested relative to sustainable wood supply				●
15.4	Ensure conservation of mountain ecosystems	P	Share of important sites protected		●		
15.5	Reduce degradation of national habitats, halt loss of biodiversity, protect threatened species by 2020	N	Species at risk showing trends of recovery		●		
16.1	Reduce all forms of violence and related deaths	P	Rate of homicides			●	
16.2	End abuse, exploitation, trafficking, and violence against children		Rate of sexual violations against children per 100,000 population	●			
16.3	Promote rule of law, ensure access to justice for all	P	Unsentenced detainees as share of overall prison population	●			
16.5	Reduce corruption & bribery	P	Control of corruption		●		
16.6	Develop effective, accountable, and transparent institutions at all levels	P	Confidence in institutions - Justice system and courts		●		
16.9	Provide legal identity for all		Proportion of births registered with a civil authority				●
16.10	Ensure public access to information & protect fundamental freedoms	P	Killing, kidnapping, arbitrary detention, and torture of media, unionists, and human rights advocates				●

Notes: "P" = uses proxy target; "N" = uses Canadian National target

Source: McArthur and Rasmussen (2017a)

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