



# SDG 7 ON SUSTAINABLE ENERGY FOR ALL

A Toolkit of Legal & Institutional Practices



# SDG 7 on Sustainable Energy for All

## A Toolkit of Legal & Institutional Practices

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## About the Toolkit

CISDL, in cooperation with the Dalhousie Schulich School of Law, Balsillie School of International Affairs/University of Waterloo, McGill University Faculty of Law/ Faculté de droit Université de Montréal, University of Victoria Peter A. Allard School of Law, and a consortium of institutional partners, held a multisite symposium on March 14, 2019 convening legal experts across Canada to discuss areas of opportunity to inform Canada's 2030 agenda. This toolkit is a part of a series, which builds upon legal research conducted in collaboration with UN Environment. The by-projects of this research looking at legal measures for achievement of the SDGs in Canada is intended to inform policy-making moving forward.

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# List of Abbreviations and Acronyms

|        |   |
|--------|---|
| APEC   | Asia-Pacific Economic Cooperation   |
| CEDAW  | <i>Convention on the Elimination of all Forms of Discrimination Against Women</i> |
| ECT    | <i>Energy Charter Treaty</i>  |
| EU     | European Union  |
| G7     | Group of Seven  |
| G20    | Group of Twenty   |
| IEA    | International Energy Agency   |
| IESO   | Independent Electricity System Operator (Ontario)                                 |
| IRENA  | International Renewable Energy Agency   |
| MCCAC  | Municipal Climate Change Action Centre (Alberta)                                  |
| MDG    | Millennium Development Goals  |
| NAMAs  | Nationally Appropriate Mitigation Actions   |
| NEB    | National Energy Board (Canada)  |
| RTA    | Regional Trade Agreement  |
| SDG    | Sustainable Development Goals   |
| SDTC   | Sustainable Development Technology Canada   |
| SE4ALL | Sustainable Energy for All  |
| UDHR   | <i>Universal Declaration on Human Rights</i>                                      |
| UNCLOS | <i>United Nations Convention on the Law of the Sea</i>                            |
| UNFCCC | <i>United Nations Framework Convention on Climate Change</i>                      |
| WTO    | World Trade Organization  |

# I. Introduction

## SDG 7: An Opportunity to Strengthen Engagement, Innovation and Action on affordable, reliable, sustainable, and modern energy for all in Canada

As United Nations Secretary General Ban Ki-moon has said: “Energy is the golden thread that connects economic growth, increased social equity, and an environment that allows the world to thrive”.<sup>1</sup> Energy was crucial to progressive realisation of the Millennium Development Goals, despite not being explicitly included in their text. The express inclusion of energy in the Sustainable Development Goals (SDGs) redresses this omission, formally acknowledging the important role of energy in society and for the attainment of all SDGs as an integrated, indivisible set of global priorities.<sup>2</sup> SDG 7 on Energy aspires to “*ensure access to affordable, reliable, sustainable, and modern energy for all*”, especially for the 1.3 billion people without electricity worldwide and 2.7 billion people who use wood and biomass to cook and heat their homes.

This Toolkit on focuses Sustainable Development Goal 7 (SDG 7 Energy), which commits to take “urgent action to combat climate change and its impacts”, emphasizing the globally agreed upon need to mitigate anthropogenic greenhouse gas emissions and to adapt to the damages caused by climate change, while acknowledging that the “United Nations Framework Convention on Climate Change (UNFCCC) is the primary international, intergovernmental forum for negotiating the global response to climate change.” The principal aim of the SDG 7 is to ensure affordable, reliable, sustainable, and modern energy for all. Specifically, the Toolkit highlights potential contributions of law and policy instruments in delivering targets 7.1 – 7.3.<sup>3</sup>

### Structure of the Toolkit

The Toolkit provides a cursory survey of principal national and international law, policy and governance measures that have the potential to contribute to realizing SDG 7. It considers options for legal and policy preparedness, notes the potential for mainstreaming and more integrated implementation at the international and national levels, and offers some recommendations to deal with these issues.

The Toolkit is separated into four sections and additional reference materials:

- **Introduction** offers brief background to the issues, the structure of the toolkit, and an overview of the intended audience.
- **Legal Innovations & Practices from Across Canada to Achieve SDG 7** provides an initial survey of federal, provincial, and territorial approaches which support achievement of specific targets under the SDG.
- **International Legal Dimensions of SDG 7** highlights legal obligations under international instruments related to biodiversity.

<sup>1</sup> ‘Sustainable Energy for All: A Framework for Action. Secretary-General’s High-Level Group on Sustainable Energy for All’ (Framework Report, United Nations, January 2012), p. 4.




<sup>2</sup> ‘Transforming our world: the 2030 Agenda for Sustainable Development’, UNGA Res. 70/1, UN Doc. A/RES/70/1 (25 September 2015), Declaration (“SDGs Declaration”), para. 18.

<sup>3</sup> *Ibid.*

- **Legal Preparedness for Achieving SDG 7 with Canadians** summarizes findings and provides mechanisms for enhancing efforts across all levels of government.
- **Recommended Resources** provides a brief list of resources which could supplement information provided.
- **Annex I: Domestic Legal Instruments: Overview Table** provides a single reference table which includes all of the domestic laws identified separated by SDG target.
- **Annex II: About the Project** summarizes the project, key partners, and goals.

The analysis suggests that the SDG 7 targets are supported by international governance systems and legal measures, including multilateral environmental agreements (MEAs), as well as Canadian domestic instruments and institutions which provide pre-existing pathways to support national implementation. While law and governance mechanisms which support achievement of the SDG 7 have been identified, there remain significant areas of opportunity to promote greater policy cohesion, refinement, scaling up of ambition, and engagement with civil society actors. This project, in collaboration Economic and Social Development Canada (ESDC), as well as law schools and research networks across the country, identifies current pathways that provide for the achievement of SDG 7 in Canada.

## Reference Guide

|   |                     |   |
|---|---------------------|---|
|   | <b>Key Aspects</b>  | Summarizes principal takeaways from the legislation. Emphasizes the elements exemplified by the approach. |
|  | <b>SDG Targets</b>  | Identifies the SDG targets which the legislative approach may be used to implement.                       |
|  | <b>Jurisdiction</b> | Indicates the jurisdiction of the legislation.  |

The above icons are used throughout the report to provide guidance on aspects of the legislative approach highlighted with align with specific needs of users of this toolkit.

## Target Audience

Sustainable development as a crosscutting policy goal requires engagement of law and governance authorities at all levels. This Toolkit has a target audience of law and governance professionals at the federal, provincial, and territorial levels, as well as Aboriginal communities, and local and municipal authorities, who seek to engage in and influence debate. In addition, the Toolkit acts as a valuable resource for non-governmental organizations (NGOs) and other members of civil society who are seeking to understand and identify options to inform decision makers within their constituencies. Lastly, the Toolkit aims to support legal professionals, members of the judiciary, law professors, and students seeking to gain insights on the role played by law and governance institutions in supporting achievement of SDG 7.

## SDG 7: Catalyzing action to ensure access to sustainable energy for all.

### SDG 7 on Energy – Ensure access to affordable, reliable, sustainable, and modern energy for all.

7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services;

7.2 By 2030, increase substantially the share of renewable energy in the global energy mix; and

7.3 By 2030, double the global rate of improvement in energy efficiency.

7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology; and

7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.

## II. Legal Innovations & Practices from Across Canada to Achieve SDG 7

In 2016, the *Pan-Canadian Framework on Clean Growth and Climate Change* was announced.<sup>4</sup> The *Pan-Canadian Framework* aims to fuel green growth in Canada by building upon the earlier legislation and grounding actions in four pillars: (i) carbon pricing to encourage a reduction in pollution, (ii) complementary actions which remove barriers and enhance ambition, (iii) adaption and building of resilience in infrastructure and communities, and (iv) fostering development of clean technology, innovation and green jobs.<sup>5</sup> Prioritization of clean technology under the *Pan-Canadian Framework* includes investment in research and development, assistance programs for commercialization, a “lead by example” mandate to integrate clean technologies into governmental operations, and work with northern communities to adapt clean technologies to their needs.<sup>6</sup> As a component of the green growth strategy, Canada aims to produce 90% of its electricity by 2030 from non-emitting sources (hydro, nuclear, wind and solar).<sup>7</sup>

Development of clean energy projects in rural and northern Canada is of critical importance to both energy security and livelihoods, in particular for Indigenous communities. Statistics collected by University of Calgary researchers suggest there are upwards of 300 Indigenous clean energy projects

<sup>4</sup> Canada, “Pan-Canadian Framework on Clean Growth and Climate Change” (2016) online <[http://publications.gc.ca/collections/collection\\_2017/eccc/En4-294-2016-eng.pdf](http://publications.gc.ca/collections/collection_2017/eccc/En4-294-2016-eng.pdf)> [Pan-Canadian Framework]

<sup>5</sup> *Ibid.* at 2-3.

<sup>6</sup> Canada, “Federal Actions for a Clean Growth Economy: Delivering on the Pan-Canadian Framework on Clean Growth and Climate Change,” (2016), at 7, 19-20, online: <[www.canada.ca/content/dam/themes/environment/documents/weather1/20170119-en.pdf](http://www.canada.ca/content/dam/themes/environment/documents/weather1/20170119-en.pdf)>. [Federal Actions for a Clean Growth]

<sup>7</sup> *Ibid.*, at 15.



underway across Canada, serving the needs of 190 communities.<sup>8</sup> Nationally, the clean energy sector is identified as an area of further prioritization, with non-hydro renewables expanding from 2% to 11% over 2005-2015,<sup>9</sup> and viewed as a major source of clean growth for future generations.<sup>10</sup> Furtherance of a clean energy agenda necessitates collaboration across all levels government given the federalist system in place in Canada whereby aspects of governance authority are split between the federal, provincial, and territorial, government, as well as aboriginal authorities. Governance powers to pass laws relating to the environment are split between the federal, provincial and territorial governments. Federal powers include fisheries, shipping, interprovincial trade and commerce, and criminal law, as well as residuary legislative powers relating to “Peace, Order and Good Governance in Canada.” While provincial/territorial powers derive from environmental issues of a local nature, with most natural resources owned by provincial and territorial authorities.<sup>11</sup>This section will explore approaches to achieve SDG 7 at the federal, provincial and territorial level.

## Federal

### *National Energy Board Act*



### Institutional approach and procedural framework for utility development

Promotion of access to affordable, renewable, and modern energy in Canada in support of SDG 7 requires a coordinated approach at both the federal and the provincial and territorial levels to allow for responsiveness to local needs and circumstances. The *National Energy Board Act* creates the National Energy Board (NEB), which regulates international and interprovincial aspects of utility services,<sup>12</sup> with the NEB also designated responsibilities under related legislation.<sup>13</sup> The NEB reviews applications, which are adjudicated through public hearings,<sup>14</sup> on a range of factors relating to the provision of utilities including project development and expansions (pipelines and powerlines),<sup>15</sup> tolls and tariffs,<sup>16</sup> import/export licenses,<sup>17</sup> interprovincial trade in oil and gas,<sup>18</sup> as well as reporting on the environmental assessment of the project.<sup>19</sup>

The polluter pays principle is implemented through a liability regime which in addition to a determination of negligence for an unintended or uncontrolled release of contaminants based on the degree of fault provides for joint and several liability for the authorized developer or operator in cases of a negligent subcontractor or worker, and absolute liability (without proof of fault) applied to the authorized developer or operator, with a limit on liability, and robust financial resource requirements.<sup>20</sup> Public hearings are provided for issuance, revocation or suspension of a certificate, with outcomes of their recommendations reported to the Minister for consideration and

<sup>8</sup> Gregory Lowan-Trudeau, “Indigenous Environmental Education: The Case of Renewable Energy Projects” *Educational Studies* 53(6), 601–613 at 606, 2017, Nicole Ireland, “First Nations see economic future in Canada’s growing clean energy industry” (5 November 2016), online: <[www.cbc.ca/news/indigenous/first-nations-pursue-canada-clean-energy-economy-1.3829405](http://www.cbc.ca/news/indigenous/first-nations-pursue-canada-clean-energy-economy-1.3829405)>; Indigenous Renewable Energy, “Mapping renewable energy projects by Indigenous communities across Canada,” online: , <https://indigenousenergy.ca/>.

<sup>9</sup> National Energy Board, “Canada’s Renewable Power Landscape: Energy Market Analysis 2016” (Government of Canada, 2016), online: <[www.neb-one.gc.ca/nrg/sttstc/lctrct/rprt/2016cndrnwblpwr/2016cndrnwblpwr-eng.pdf](http://www.neb-one.gc.ca/nrg/sttstc/lctrct/rprt/2016cndrnwblpwr/2016cndrnwblpwr-eng.pdf)>.

<sup>10</sup> Federal Actions for a Clean Growth, *supra* note 6 at 16.

<sup>11</sup> For further discussion see: Peter W. Hogg, *Constitutional Law of Canada*, 5th Edition (Scarborough, ON: Thomson Carswell, 2007).

<sup>12</sup> National Energy Board Act, RSC, 1985, c N-7, Sec 3, 11. [NEBA]

<sup>13</sup> *Ibid.* at Secs 12.1, 28.2(1), 52(3), 58(6), 58.16(6), 245; Canada Oil and Gas Operations Act, RSC 1985, c O-7; Canadian Environmental Assessment Act, SC 1992, c 37 (CEAA), Northern Pipeline Act, RSC 1985, c N-26; Canada Petroleum Resources Act, RSC 1985, c C-36 (2nd Supp); Canada Transportation Act, SC 1996, c C10.

<sup>14</sup> *Ibid.* at Sec 24.

<sup>15</sup> *Ibid.*, at Secs 29-58.4.

<sup>16</sup> *Ibid.* at Secs 58.5-72.

<sup>17</sup> *Ibid.* at Secs 116-119.7.

<sup>18</sup> *Ibid.* at Secs 123-128.

<sup>19</sup> *Ibid.* at Secs 52(3), 58(6), 58.16(6).

<sup>20</sup> *Ibid.* at Secs 48.11-48.17.

final approval.<sup>21</sup> Consideration, evaluation and review of projects by an independent institution and through public hearing allows for modern energy services, which are reliable, affordable, and in line with environmental priorities to be deployed in a responsible way in line with SDG 7.1, 7.3 and 7.a.



SDG 7.1, SDG 7.3, SDG 7.a.



Federal

## *Income Tax Act*



Renewable energy or conservation expenses as eligible expenses

Under the Canada *Income Tax Act*, organizations are able to claim Canadian renewable or conservation expenses (including stranded oil sands assets) as deductible expenses on their tax filings.<sup>22</sup> By allowing expenses relating to renewable energy or conservation properties to be eligible expenses for tax purposes positively incentivizes development of renewable energy services critical to a green transition in key energy sectors, and assists in mitigating core risks to capital (stranded assets) in furtherance of SDG 7.2 primarily, but is also implicitly supportive of the broader aspects of SDG 7 as a whole.



SDG 7.1, SDG 7.2, SDG 7.3, SDG 7.a, SDG 7.b.



Federal

## *Canada Infrastructure Bank Act*



Financial support mechanism for development of renewable energy projects

The *Canada Infrastructure Bank Act* created the Infrastructure Bank with the purpose to invest and attract private sector investment in domestic sustainable infrastructure projects.<sup>23</sup> Empowered to review applications, coordinate collaborative financing and support projects through evidenced-based decision making, financial support from the Infrastructure Bank may also be provided by way of investments, loans, loan guarantees, or acquisition of derivatives.<sup>24</sup> The Bank is governed by a Board of Directors, with the Minister of Finance required to approve loans and loan guarantees, as well as provide an aggregate total of up to \$35 billion dollars to fulfill its purpose.<sup>25</sup> An institutional approach to coordinate investment into sustainable energy infrastructure provides a gateway for innovation in the clean technology sector holistically supporting SDG 7.



SDG 7.1, SDG 7.2, SDG 7.3, SDG 7.a, SDG 7.b.



Federal

<sup>21</sup> *Ibid.* at Secs 24, 52.

<sup>22</sup> Income Tax Act, RSC 1985, c 1 (5th Supp), Sec 66.1, 66.1(6)(g.1-g.2); Natural Resources Canada, Technical Guide to Canadian Renewable and Conservation Expenses (CRCE), Canmet Energy (2012), online: <[www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/CRCE%20Technical%20Guide%202014\\_en.pdf](http://www.nrcan.gc.ca/sites/www.nrcan.gc.ca/files/energy/pdf/CRCE%20Technical%20Guide%202014_en.pdf)>.

<sup>23</sup> Canada Infrastructure Bank Act, S.C. 2017, c. 20, s. 403, Sec 6. [CIBA]

<sup>24</sup> *Ibid.* at Secs 7, 18-19.

<sup>25</sup> *Ibid.* at Secs 22-23.

## Renewable Fuels Regulations



Renewable fuel is integrated into the energy mix through the *Renewable Fuels Regulations* which set minimum prescribed amounts and high-content standards for blended fuels including gasoline and biodiesel.<sup>26</sup> Mechanisms are also provided for the creation and transfer of compliance units derived from the blending of biofuels, including reporting requirements.<sup>27</sup> Setting of federal standards provides legal certainty for the expansion biofuel development in line with SDG 7.2.



## Energy Efficiency Act



The *Energy Efficiency Act* of Canada establishes a framework for restricting import, interprovincial, or domestic sale of energy-consuming products which do not fit the prescribed standard.<sup>28</sup> In addition, the Minister is provided the power to collaborate and support studies, provide grants, and contribute to programs which promote efficient energy use and utilization of alternative energy.<sup>29</sup> Prioritization and provision of powers to the Minister to promote energy efficiency lays the groundwork for market-wide efficiency measures in line with SDG 7.3.



## Provincial and Territorial Laws

Parallel initiatives, both government and stakeholder-driven, provide complementarity for the achievement of SDG 7. Promotion of the clean technology arm of the *Pan-Canadian Framework* is coordinated by the Clean Growth Hub.<sup>30</sup> Comprised of different 16 ministries, this entity provides a “whole-of-government” focal point to streamline navigation of the legislative process for development and expansion of clean energy technology, as well as access to funding and collaborations.<sup>31</sup> Sustainable Development Technology Canada (SDTC) is a foundation created by the

<sup>26</sup> Renewable Fuels Regulations, SOR/2010-189, Sec 1, 5-8 [RE Regs]; gasoline has a regular mixture of 5% biofuels with mixtures of 10% considered high-content.

<sup>27</sup> *Ibid.* at Sec 32.

<sup>28</sup> Energy Efficiency Act, SC 1992, c 36, Sec 4, 17, 20. [EEA]

<sup>29</sup> *Ibid.* at Sec 21.

<sup>30</sup> Government of Canada, Clean Growth Hub, online: <[www.ic.gc.ca/eic/site/099.nsf/eng/home](http://www.ic.gc.ca/eic/site/099.nsf/eng/home)>. [Clean Growth Hub]

<sup>31</sup> *Ibid.* Clean Growth Hub Members: Agriculture and Agri-Food Canada, Business Development Bank of Canada, Canadian Commercial Corporation, Crown-Indigenous Relations and Northern Affairs Canada, Environment and Climate Change Canada, Export Development

Government of Canada and managed by a 15 person board of directors with the mandate to provide to support to Canadian companies focused on environmental technologies. In 2017, the Government of Canada committed to providing \$400 million over five years to SDTC to transform the nascent clean technology industry.<sup>32</sup> The Canadian Clean Energy Conferences facilitates project opportunities for the renewables industry through business-to-business events to catalyze action on renewable energy development.<sup>33</sup> These initiatives, both public and private, are critical to achievement of SDG 7 on sustainable energy as they fill critical knowledge, partnership, and funding gaps, while fostering valuable collaborations. The Clean Growth Hub and SDTC are particularly supportive of the whole of SDG 7. These initiatives and institutions operation against the backdrop of law and governance approaches at the provincial and territorial level.

### *7.1 By 2030, ensure universal access to affordable, reliable, and modern energy services*

#### ***Ontario Energy Board Act / Ontario Electricity Act*** **Institutional framework for provincial regulation of the energy sector**

Under the *Ontario Energy Board Act*, the Ontario Energy Board regulates the natural gas and utility industries.<sup>34</sup> The OEB sets rates and licenses entities in the Ontario energy sector, including the Independent Electricity System Operator (IESO), generators, transmitters, distributors, wholesalers, electricity retailers, and natural gas markets,<sup>35</sup> as well as providing consumers with a forum to comment on energy-related decisions in the province.<sup>36</sup> A sustainable supply of safe electricity to consumers throughout Ontario is provided through the *Ontario Electricity Act*,<sup>37</sup> with the IESO regulating generation and transmission of electricity in Ontario.<sup>38</sup> In addition, the Act establishes a framework governing the energy markets,<sup>39</sup> outlines pricing and procurement requirements,<sup>40</sup> designates Hydro One as the operator of electrical distribution,<sup>41</sup> and Ontario Power Generation as the operator of facilities,<sup>42</sup> as well as exercising responsibilities under the *Ontario Fair Hydro Plan Act, 2017*, which sets in place a price adjustment scheme.<sup>43</sup> Adoption of an institutional approach through an independent operator supports access to affordable energy in line with SDG 7.1.

Canada, Fisheries and Oceans Canada, Global Affairs Canada, Indigenous Services Canada, Innovation, Science and Economic Development Canada (Co-Chair), National Research Council Canada, Natural Resources Canada (Co-Chair), Standards Council of Canada, Sustainable Development Technology Canada, Transport Canada, Treasury Board of Canada Secretariat.

<sup>32</sup> Sustainable Development Technology Canada, "About," online: < <https://www.sdtec.ca/en/about/about-us/> >.

<sup>33</sup> Canadian Clean Energy Conferences Online, "Events," online: <<https://canadianclean.com/>>.

<sup>34</sup> Ontario Energy Board Act, S.O. 1998, Ch 15 Sched B, Sec 4, 36, 48, 57. [On EBA]

<sup>35</sup> *Ibid.* at Secs 36, 48, 57.

<sup>36</sup> *Ibid.* at Secs 19-21.

<sup>37</sup> Electricity Act, SO 1998, c 15, Sched. A, Sec 1. [On EA]

<sup>38</sup> *Ibid.* at Secs 4-6.

<sup>39</sup> *Ibid.* at Secs 25-40.


<sup>40</sup> *Ibid.* at Secs 25.29-34.

<sup>41</sup> *Ibid.* at Sec 48.

<sup>42</sup> *Ibid.* at Sec 53.1.

<sup>43</sup> *Ibid.* at Sec 53.1(1.1); Ontario Fair Hydro Plan Act, 2017, S.O. 2017, c. 16, Sched. 1.


 SDG 7.1.

 Ontario

### ***The Energy Consumer Protection Act /*** **Consumer protections relating to affordability of utility services** ***Environmental Bill of Rights***

To further support affordability of utilities, *The Energy Consumer Protection Act* protects Ontario energy consumers from unfair practices leading to high process, unaffordable energy, or other unfair practices regarding the sale and distribution of energy services.<sup>44</sup> Consumers of energy in Ontario are provided this utility at fair and comparable prices, with customers empowered to initiate actions against energy distributors in Superior Court to consider contract related claims.<sup>45</sup> Further, Ontario has the *Environmental Bill of Rights*, which requires the Auditor General to report annually on activities related to promotion of energy conservation, and reduction of greenhouse gas emissions.<sup>46</sup> Collectively, the Ontario framework identifies a range of actors, with disseminated responsibilities, and aims to ensure modern energy services are provided in a way that is responsive to the cost concerns of consumers in line with SDG 7.1. Further, this framework highlights the spectrum of responsibilities underpinning SDG 7.1 and SDG 7 more broadly.

 SDG 7.1.

 Ontario

### ***Energy Governance Act*** **Institutional approach including a royalty on service providers**

Québec similarly provides an institutional structure under the *Energy Governance Act*, empowering the Energy Board to fix rates and regulate transmission and delivery of natural gas,<sup>47</sup> and to regulate Hydro-Québec's provision of hydroelectric energy services, including the payment of a royalty rate to the generations fund – a fund dedicated to paying down provincial debt.<sup>48</sup>

 SDG 7.1.

 Quebec

<sup>44</sup> Energy Consumer Protection Act, 2010, S.O. 2010, c. 8, Sec 10. [On ECPA]

<sup>45</sup> *Ibid.* at Secs 16, 27-28.

<sup>46</sup> Environmental Bill of Rights, SO 1993, Ch 28, Sec 51.

<sup>47</sup> Loi sur la régie de l'énergie, RLRQ c R-6.01, Sec 1, 5, 31.

<sup>48</sup> Loi sur Hydro-Québec, RLRQ c H-5, Sec 3, 15.1.1, 22, 32; Québec, "the generations fund" online: <[www.budget.finances.gouv.qc.ca/fondsdesgenerations/index\\_en.asp](http://www.budget.finances.gouv.qc.ca/fondsdesgenerations/index_en.asp)>.

## ***SaskEnergy Regulations***



**Establishes a default price for energy to ensure affordability (provincial average)**

The *SaskEnergy Regulations* provide that where no explicit price is stated, the default is the provincial average gas price, as set by the Department of Energy and Mines for the month prior to the month for which the cost of gas will apply.<sup>49</sup> Establishment of a default price prevents exploitative or predatory pricing by utility providers. Inclusion of price protection measures support SDG 7.1.



SDG 7.1.



Saskatchewan

## ***Public Utilities Act***



**Prescribed rates to prevent discriminatory or preferential rates**

Northwest Territories' *Public Utilities Act* provides that only the prescribed rates may be charged, with the utility provided required to report on the rates applied to customers.<sup>50</sup> Application of an unreasonable, discriminatory or unduly preferential rate is expressly prohibited.<sup>51</sup> Introduction of a set rate provides an alternative modalities which support provision of affordable energy services in line with SDG 7.1.



SDG 7.1.



Northwest Territories

*7.2 By 2030, increase substantially the share of renewable energy in the global energy mix*

## ***Energy Policy 2030***



**Strategic policy framework for transition to a low carbon economy**

Enhancing the share of renewable energy in the energy mix comes from various pathways at the provincial/territorial level. In the Energy Policy 2030, Quebec set targets to promote a transition to a low-carbon economy including to: increase energy efficacy by 15%, reduce consumption of petroleum products by 40%, eliminate the use of thermal coal, to increase total renewable energy production by 25%, and increase bioenergy production by 50%.<sup>52</sup> Energy Transition Quebec (ETQ) is established to coordinate the implementation of energy transition programs and initiatives, develop strategic planning, and provide support services (in collaboration with Invest Quebec) for

<sup>49</sup> The *SaskEnergy Regulations*, RS 1992, c S35.1, Sec 9(b)(ii),

<sup>50</sup> *Public Utilities Act*, RSNWT 1988, c 24 (Supp), Sec 43-47, 52-54. [PUA]

<sup>51</sup> *Ibid.* at Sec 48.

<sup>52</sup> Quebec, "Politique énergétique du Québec sur l'horizon 2030" (Bibliothèque et Archives nationales du Québec, 2016), at 12, online: <<https://mern.gouv.qc.ca/wp-content/uploads/2016/04/Politique-energetique-2030.pdf>>.

energy efficiency measures.<sup>53</sup> The work of ETQ is funded through annual contributions from energy distributors as prescribed, as well as funds from Green Fund and the Energy Transition Fund.<sup>54</sup> Civil society engagement is facilitated through the “Stakeholders’ Table,” a 15 person body of technical experts appointed by the ETQ board of directors, which provides a mechanism for stakeholders expertise to inform the development and implementation of the management plan, programs and initiatives.<sup>55</sup> Designation of high-level provincial targets coupled with a dedicated institutional framework, financial support for innovation, and stakeholder informed strategic planning, provides a holistic approach to achievement of SDG 7.2 and 7.3.



SDG 7.2, SDG 7.3.



Quebec

## Renewable Electricity Regulations



Framework for diversification of the provincial energy mix

Nova Scotia in the *Renewable Electricity Regulations* provides a strong framework for diversification of the energy mix of the province.<sup>56</sup> A definition is provided for “renewable low-impact electricity” which includes solar, wind, river-current, ocean-powered, tidal, wave, sustainably harvested biomass, and landfill gas.<sup>57</sup> Gradually increasing minimum standard amounts of renewable low-impact electricity to be supplied to customers are set for service providers beginning in 2011-2012 (5%), 2013-2014 (10%), 2015-2020 (25%), and 2020 (40%).<sup>58</sup>

A feed-in tariff system is established, with the board empowered to establish different tariff rates per source, as well as a special “community feed-in tariff” for energy produced by universities, municipalities, aboriginal communities, or joint ventures among two or more aforementioned groups,<sup>59</sup> with a specific system put in place for developmental tidal.<sup>60</sup> Feed-in applications are submitted for review and approval by the Minister, with an inter-ministerial committee established to review community feed-in applications.<sup>61</sup> Recipients of approval must provide an audited report annually on progress, energy produced, and the variance between expected versus actual capacity.<sup>62</sup> Importantly, electricity purchased by a public utility under the feed-in tariff program qualifies as renewable energy.<sup>63</sup> Set targets and mechanisms for integration of renewable energy sources into the energy mix assists in achievement of SDG 7.2 domestically.



SDG 7.2.



Nova Scotia

<sup>53</sup> Loi concernant la mise en œuvre de la Politique énergétique 2030 et modifiant diverses dispositions législatives, LQ 2016, c 35, Sec 4-5, 9-10, 18, 68. [QC ETQ]; Loi sur transition énergétique Québec, RLRQ c T-11.02.

<sup>54</sup> *Ibid.* at Secs 48-49.

<sup>55</sup> *Ibid.* at Secs 41-42.

<sup>56</sup> Renewable Electricity Regulations, NS Reg 155/2010. [NS RE Reg]

<sup>57</sup> *Ibid.* at Sec 3(1).

<sup>58</sup> *Ibid.* at Sec 4-6A.

<sup>59</sup> *Ibid.* at Secs 18-20.

<sup>60</sup> *Ibid.* at Secs 22, 24A-B.

<sup>61</sup> *Ibid.* at Secs 28, 35.

<sup>62</sup> *Ibid.* at Secs 38-40.

<sup>63</sup> *Ibid.* at, Sec 10.

## ***Electricity from Renewable Resources Regulation*** **Renewable energy consumption target and procurement percentage from Aboriginal providers**

New Brunswick adopted a high-level consumption target – 40% renewable energy by 2020 – and procurement targets including up to 40 MW from Aboriginal businesses, and small-scale local entities.<sup>64</sup> Inclusion of renewable energy targets and a set percentage to be purchased from Aboriginal providers integrates both ambition and equity into the law and governance framework in support of SDG 7.2, SDG 7.a.



SDG 7.2.



New Brunswick

## ***Renewable Energy Act*** **Minimum purchase price for renewables to support comparativeness**

Prince Edward Island, in the *Renewable Energy Act*, sets a minimum purchase price for renewable energy.<sup>65</sup> Integration of a prescribed rate provides certainty to utility providers and supports the competitiveness of the sector in line with SDG 7.2.



SDG 7.2.



Prince Edward Island

## ***Marine Renewable-Energy Act*** **Designation of priority areas for renewable-energy production**

Nova Scotia's *Marine Renewable-Energy Act* designates two priority areas for marine renewable-energy production, Schedule A and B,<sup>66</sup> as well as general areas for marine renewable-energy production, designated in Schedule C,<sup>67</sup> with a permit scheme established allowing individuals or entities to develop marine power generation in line with the provincial feed-in tariff system.<sup>68</sup> Participants in the system are obliged to collect and share data on activities relating to the permit to be shared with the Minister.<sup>69</sup> Establishment of a regulatory scheme to promote production of renewables from priority areas provides clarity to the viability of the projects, and empowers disseminated development and production, supporting an increasing share of renewables in the energy mix in line with SDG 7.2.



SDG 7.2.

<sup>64</sup> Electricity from Renewable Resources Regulation NB Reg 2015-60, Sec 3, 7, 14.

<sup>65</sup> Renewable Energy Act, RSPEI 1988, c R-12.1, Sec 8.

<sup>66</sup> Marine Renewable-Energy Act, RSNS 2015, c 32, Secs 10-12, Schedule A-B. [NS ERR Regs]

<sup>67</sup> *Ibid.* at Secs 13-21, Schedule C.

<sup>68</sup> *Ibid.* at Secs 22-28.

<sup>69</sup> *Ibid.*



 Nova Scotia

***Cities, Towns, and Villages Act / Business Development Assistance Act***  Financial support (through community levy, or grant/loan program) for renewable energy projects

The Northwest Territories *Cities, Towns, and Villages Act* provides a streamlined process for development of renewable energy works. Municipal undertakings for local improvement must be authorized by a local bylaw which outlines the scope of the project, the total cost, and the financing make up – percent derived from municipal revenue, debt, and local improvement levy.<sup>70</sup> Before the bylaw may be approved, 60% of the municipal residents must approve the new levy, unless the project is financed by long-term debt which must be approved by the Minister.<sup>71</sup> Through the Yukon *Business Development Assistance Act*, commercial projects which will increase the number of long-term employment opportunities in the territory, upon recommendation of the Business Development Board and approval of the Minister, are eligible for financial assistance which may come by way of grant or loan.<sup>72</sup> Support schemes for renewable energy projects advance core aspects of SDG 7.2.

 SDG 7.2.

 Northwest Territories, Yukon

***Micro-generation Regulation***  Framework for inclusion of micro-generation renewable energy production

Alberta's *Micro-generation Regulation* provides that customers may provide notice to a service provider that they intend to become a micro-generator with the costs of connecting to the grid and compliance to be borne by the individual or entity.<sup>73</sup> Municipalities, community organizations, and public schools may apply to grants, provided by the MCCAC (Municipal Climate Change Action Centre) for the installation of solar photovoltaic systems.<sup>74</sup> By providing access to funding, be it through a levy, a loan or grant, or grant program targeted at non-for-profit generation, these approaches demonstrate the complementarity of programs moving forward SDG 7.2.

 SDG 7.2.

 Alberta

<sup>70</sup> Cities, Towns, and Villages Act, RSNWT 2003, c 22, Sec 117-118, 121. [NWT CTVA]

<sup>71</sup> *Ibid.* at Sec 120.

<sup>72</sup> Business Development Assistance Act, RSY 2002, c 21, Secs 2-7.

<sup>73</sup> Micro-generation Regulation, AB Reg 27/2008, Sec 4-7.

<sup>74</sup> Municipal Climate Change Action Centre, "Alberta Municipal Solar Program," online: <[www.mccac.ca/](http://www.mccac.ca/)>.

### 7.3 By 2030, double the global rate of improvement in energy efficiency.

#### ***Efficiency Manitoba Act***



#### **Energy efficiency targets and planning long-term planning**

Efficiency Manitoba is established through *The Efficiency Manitoba Act* to implement and support demand-side GHG reduction initiatives, mitigate rate increases due to investment in alternative energy projects, and support demand-side management efforts relating to electrical power usage, water consumption, and fossil fuel usage in the transport sector.<sup>75</sup> Under a 15-year plan, annual savings of 1.5% and 0.75% per annum over the previous year are mandated for electrical energy and natural gas respectively, with new targets to be set for the proceeding 15-year term.<sup>76</sup>

Efficiency plans are to be developed for each three year term summarizing demand-side, educational, and proposed initiatives, emission reductions and cost-effectiveness of activities, stakeholder inputs, and positioning in relation to achievement of the long-term targets.<sup>77</sup> The Public Utilities Board reviews, and with the addition of any changes, approves the 3-year efficiency plan, with Hydro Manitoba directed to support the activities under the approved plan.<sup>78</sup> A stakeholder committee is also established as an advisory body to the work of Efficiency Manitoba, to assist in assessment of independent verification of emission reductions/energy savings, and to contribute to the implementation of the efficiency plan.<sup>79</sup> Institutional approaches empowered with a clear mandate and complemented by external expertise, and sufficient funding provide a pathway to achievement of SDG 7.3 and 7.b.



SDG 7.3, SDG 7.b.



Manitoba

#### ***Energy Resources Conservation Act***



#### **Establishment of expert committees to support policy development**

Nova Scotia, in the *Energy Resources Conservation Act*, provides that in executing his/her responsibility to conserve energy, the Minister may establish expert committees, define policies, programs and guidelines, specify the committee function, and provide remuneration and/or cover expenses for participation.<sup>80</sup> This directly addresses the requirements of target 7.3 by seeking to ensure growth in energy efficiency throughout Nova Scotia, which will in turn implicate Canada's compliance with target 7.3 as well.

<sup>75</sup> The Efficiency Manitoba Act, SM 2017, c 18, Secs 1-4. [Man EMA]

<sup>76</sup> *Ibid.* at Secs 7-8.

<sup>77</sup> *Ibid.* at, Sec 9.


<sup>78</sup> *Ibid.* at Secs 17-18.

<sup>79</sup> *Ibid.* at Sec 27.

<sup>80</sup> Energy Resources Conservation Act, RSNS 1989, Secs 12, 14.

 SDG 7.3.

 Nova Scotia

***Energy efficiency and conservation standards of certain electrical or hydrocarbon appliances***  Energy efficiency standards for designated appliances

Under Quebec's *Act respecting the energy efficiency and conservation standards of certain electrical or hydrocarbon appliances*, the provincial government may set energy efficiency standards for appliances including the manufacturing and assembly conditions through regulation.<sup>81</sup> These approaches show attempts to integrate flexibility in the achievement of target 7.3, be that through modalities for expert consultation, or use of regulations to gradually increase standards.

 SDG 7.3.

 Quebec

*7.a By 2030, enhance international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology; and*

*7.b By 2030, expand infrastructure and upgrade technology for supplying modern and sustainable energy services for all in developing countries, in particular least developed countries, small island developing States, and land-locked developing countries, in accordance with their respective programmes of support.*

***Verschuren Centre / Clean Foundation***  Institutional approaches to support research and development of clean energy

Research, cooperation and collaboration are foundational to the achievement of SDG 7 broadly and to SDG 7.a and 7.b specifically. The Verschuren Centre, on the Cape Breton University campus, is a research institution focused on the development and adaptation of clean technologies to achieve sustainable resource utilization.<sup>82</sup> With research focused on agri-marine, clean energy,

<sup>81</sup> Loi sur les normes d'efficacité énergétique et d'économie d'énergie de certains appareils fonctionnant à l'électricité ou aux hydrocarbures, RLRQ c N-1.01, Art 21.

<sup>82</sup> Verschuren Centre, "Vision" online: <<http://verschurencentre.ca/index.php/our-centre/vision-mission>>.

aquatic industry, and nanotechnology, the Centre looks to advance knowledge, partnerships and innovation for a sustainable economy. Also, in Nova Scotia, the Clean Foundation is a charitable organization which acts as an “independent voice for sustainability” assisting individuals, homeowners, organizations, and communities in achieving energy efficiency goals, conducting ecosystem restoration, promoting green transportation, reducing waste, and mitigating effects of climate change.<sup>83</sup> Both institutions play a vital role in fostering research, mobilizing awareness and catalyzing action on a sustainable transition in line with SDG 7.a and 7.b.



SDG 7.a, SDG 7.b.



Nova Scotia

## III. International Legal Dimensions of SDG 7

International law and policy can play a role in facilitating and accelerating changes in global energy production and consumption and steer State and non-State actors towards increased use of low-carbon energy sources. However, at present, international law relating to sustainable energy is underdeveloped and may have a limited role in achieving SDG 7. Despite extensive political agreement on the need to further increase access to modern, affordable, sustainable energy services, binding international law instruments tend to indirectly, rather than directly, relate to sustainable energy and SDG 7. Implementation of SDG 7 can draw upon the normative guidance found in a wide range of international as well as bilateral and regional policy instruments.

To date, international treaties have largely avoided creating binding sustainable energy generation and consumption obligations. Rather, the relevant instruments have sought to facilitate decentralised sustainable energy policy choices and investment through innovative mechanisms and support measures. International treaties have been designed to balance incentives and disincentives and to motivate and influence behavioural change among States and their domestic actors.<sup>84</sup> Canada is a Party to many of these agreements, providing areas of opportunity to further domestic opportunity. For the purpose of this Toolkit, focus is placed on how international agreements and frameworks provide a primary trigger to further strengthen governance, law and policy in support of SDG 7.

### Table 1: Relevant International Agreements

<sup>83</sup> Clean Foundation, “About Us: Green solutions for today, environmental leadership for tomorrow” online: <<https://clean.ns.ca/about-us/>>.

<sup>84</sup> This section of the toolkit draws upon research previously conducted through a collaboration of CISDL and UNEP. See: Stuart Bruce & Sean Stephenson, “SDG 7 on Sustainable Energy for All: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Statute of the International Renewable Energy Agency (IRENA)  
 United Nations Framework Convention on Climate Change (UNFCCC) and Kyoto Protocol  
 Paris Agreement to the United Nations Framework Convention on Climate Change  
 United Nations Convention on the Law of the Sea (UNCLOS)  
 The Energy Charter Treaty (ECT)  
 WTO and Regional Trade Agreements\*

### ***Statute of the International Renewable Energy Agency (IRENA)*** International agency to promote the adoption of renewable energy technology

Directly relevant to SDG 7 is the IRENA Statute, which articulates the only generally accepted definition of renewable energy in international law and provides strong, detailed support for its implementation, especially for target 7.2. The aim of IRENA is to promote increased adoption of renewable energy, taking into account national priorities, and the contribution clean energy sources play in biodiversity conservation, climate protection, and sustainable development.<sup>85</sup>

Renewable energy is defined as “all forms of energy produced from renewable sources in a sustainable manner, which include ... (i) bioenergy; (ii) geothermal energy; (iii) hydropower; (iv) ocean energy, including inter alia tidal, wave and ocean thermal energy; (v) solar energy; and (vi) wind energy.”<sup>86</sup> The IRENA Statute supports targets 7.2, 7.a and 7.b primarily through the mandate and objectives of the international organisation that it created, which include knowledge transfer, capacity building and promotion of international cooperation. Most relevantly, in performing its activities, IRENA is tasked to become a center of excellence which can facilitate efficient development and transfer of knowledge and technology.<sup>87</sup>

#### **Relevance for Canada**

In January 2019, Canada became the 160<sup>th</sup> member of IRENA to establish the domestic priority to continue to develop the share of renewable energy in the national energy mix.<sup>88</sup> For Canada, participation in IRENA is about accelerating domestic renewable energy production and creating jobs in the green economy.<sup>89</sup>



**SDG 7.2, SDG 7.a, SDG 7.b.**



**International Agreement. Canada is a Party.**

<sup>85</sup> *Statute of the International Renewable Energy Agency*, IRENA/FC/Statute, 26 January 2009 (entered into force 8 July 2010), Art 2. [IRENA Statute]

<sup>86</sup> *Ibid.* at Art 3. The IRENA Statute defines renewable energy by its source, but it does not define the “*sustainable manner*” in which renewable energy must be produced.

<sup>87</sup> *Ibid.* at Art 4: “As a centre of excellence for renewable energy technology and acting as a facilitator and catalyst, providing experience for practical applications and policies, offering support on all matters relating to renewable energy and helping countries to benefit from the efficient development and transfer of knowledge and technology”.

<sup>88</sup> IRENA, “Canada Joins International Renewable Energy Agency” Press Release (9 January 2019), online: <[www.irena.org/newsroom/pressreleases/2019/Jan/Canada-Joins-International-Renewable-Energy-Agency](http://www.irena.org/newsroom/pressreleases/2019/Jan/Canada-Joins-International-Renewable-Energy-Agency)>.

<sup>89</sup> Jonny Tiernan “Canada Just Joined IRENA — Here Is Why That Matters” Clean Technica (4 March 2019), online: <<https://cleantechnica.com/2019/03/04/canada-just-joined-irena-here-is-why-that-matters/>>.

## ***United Nations Framework Convention on Climate Change (UNFCCC) / Kyoto Protocol***



**International agreement for governance of climate change**

The key international law instruments in support of the SDG to combat climate change and its impacts are the 1992 United Nations Framework Convention on Climate Change (UNFCCC), its 1997 Kyoto Protocol and its 2015 Paris Agreement. The UNFCCC recognizes the need for countries, in particular developing countries, to have access to the resources needed to foster sustainable development, including through use of new technologies.<sup>90</sup> Under the UNFCCC, the Parties agree to cooperate to promote, among other things, diffusion and transfer of technologies to support reduction of GHG emissions.<sup>91</sup>

While renewable energy is not expressly mentioned in the UNFCCC as a relevant measure, and energy efficiency is noted only in the preamble in the context of a potential measure to counteract growing energy consumption,<sup>92</sup> the Kyoto Protocol set out agreed emissions reductions targets and the market mechanisms available to reduce greenhouse gases. Though it does not mandate the types of measures related to energy that are to be used, the Kyoto Protocol provides its Parties with discretion to implement and elaborate policies and measures, with explicit reference to renewable energy sources, in accordance with their national circumstances.<sup>93</sup> The relevance of the UNFCCC and Kyoto Protocol to advancing SDG 7 is twofold. First, they establish global objectives, an international framework and rules related to emissions reductions and market mechanisms that can incentivise investments in renewable energy and energy efficiency projects. Second, they establish obligations for States to cooperate, share and transfer low-carbon energy technologies and knowledge, as well as financial assistance.<sup>94</sup>

While the global climate framework does not impose obligations on Parties to generate or provide access to sustainable energy, in practice it has catalysed significant investment into sustainable energy projects and contributed to knowledge transfer, particularly through Clean Development Mechanism projects. In this manner, the climate regime's evolution will continue to directly and indirectly affect the implementation of SDG 7.

### **Relevance for Canada**

Canada, through establishment of its NDC, announced collaboration with more than 70 other member governments – both national and subnational – to phase out coal in the Powering Past

<sup>90</sup> *United Nations Framework Convention on Climate Change*, 9 May 1992, 31 ILM 849 (entered into force 21 March 1994), Preamble. [UNFCCC]

<sup>91</sup> *Ibid.* at Art 4(1), 4(5).

<sup>92</sup> *Ibid.* at Preamble para. 22: "Recognizing that all countries, especially developing countries, need access to resources required to achieve sustainable social and economic development and that, in order for developing countries to progress towards that goal, their energy consumption will need to grow taking into account the possibilities for achieving greater energy efficiency and for controlling greenhouse gas emissions in general, including through the application of new technologies on terms which make such an application economically and socially beneficial."

<sup>93</sup> *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, Dec. 10, 1997, U.N. Doc FCCC/CP/1997/7/Add.1, 37 I.L.M. 22 (entered into force 16 February 2005), Art 10(b)(i) essentially restates Art 4(1)(b) of the UNFCCC and goes on to note "*such programmes would, inter alia, concern the energy, transport and industry sectors as well as agriculture, forestry and waste management*". Art 2(1)(a) provides a non-exhaustive list of eight non-binding policy options including "enhancement of energy efficiency in relevant sectors of the national economy" and "promotion, development and increased use of, new and renewable forms of energy". [Kyoto Protocol].

<sup>94</sup> UNFCCC, *supra* note 89, Art 4(1)(c), 4(1)(g), 4(1)(i), 4(3)-(5), 6(b) and 11(1); Kyoto Protocol, *supra* note 92 at Art 10(c)-(e); 11(2).

Coal Alliance (PPCA).<sup>95</sup> Additionally, through prioritization of clean technology in the *Pan-Canadian Framework*, Canada is continuing to transition domestic energy mix towards exclusively emission free sources. Continued cooperation under the UNFCCC is critical to the advancement of SDG 7.



SDG 7.1, SDG 7.2, SDG 7.3, SDG 7.a, SDG 7.b.



Multilateral Environmental Agreement. Canada is a Party.

## ***Paris Agreement / Paris Agreement Work Programme*** **Nationally determined targets, enhanced transparency, and facilitative compliance**

The Paris Agreement, adopted in 2015, acknowledges in its Preamble that climate change is a common concern of mankind, emphasizing the importance of protecting biodiversity and maintaining ecosystem integrity in particular oceans.<sup>96</sup> Key objectives outlined include: holding global temperature rise well below 2°C in pursuit of only a 1.5°C rise, fostering resilience to climate-related impacts, and mobilizing finance flows as a pathway to low emission and climate resilient development.<sup>97</sup> National commitments are established by way of non-binding nationally determined contributions (NDCs), which are reviewed every five years.<sup>98</sup>

Market and non-market mechanisms are provided for in order to promote adaptation and mitigation actions, foster sustainable development, and generate transferable mitigation outcomes towards domestic NDCs.<sup>99</sup> A commitment is made by the Parties to strengthen cooperation to enhance technology development and transfer, capacity building, climate change education, and public participation, with implementation of the Agreement to be conducted in accordance with the principle of common but differentiated responsibilities.<sup>100</sup> In addition, Parties further agreed to cooperate to avert, minimize, and address climate change loss and damage including actions relating to early warning systems,<sup>101</sup> to create an enhanced transparency and accountability reporting framework to provide flexibility domestically, and internationally a clear picture of climate change actions which contribute to achievement of the NDCs,<sup>102</sup> as well as a compliance framework which is facilitative, transparent, non-adversarial and non-punitive.<sup>103</sup>

Although low-carbon technologies are not an explicit, textual focus of the pre- or post-2020 climate regime, increased generation and use of sustainable energies and “making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient

<sup>95</sup> Canada, “Powering Past Coal Alliance Declaration” (November 2017), online:

<[www.canada.ca/en/services/environment/weather/climatechange/canada-international-action/coal-phase-out/alliance-declaration.html](http://www.canada.ca/en/services/environment/weather/climatechange/canada-international-action/coal-phase-out/alliance-declaration.html)>.

<sup>96</sup> UNFCCC, “Decision CP21: Adoption of the Paris Agreement” FCCC/CP/2015/L.9/Rev.1, <<https://unfccc.int/resource/docs/2015/cop21/eng/l09r01.pdf>> [Paris Agreement]; preamble; For further discussion, see: Marie-Claire Cordonier Segger, “Advancing the Paris Agreement on Climate Change for Sustainable Development” (2017) *Cambridge Journal of International and Comparative Law* Vol 5 / 2, p202; Freedom-Kai Phillips and Konstantia Koutouki “International Law and Marine Ecosystem Governance: The Climate Change Nexus” in Paul Harris ed. *Climate Change and Ocean Governance: Politics and Policy for Threatened Seas* (Cambridge: Cambridge University Press, 2019).

<sup>97</sup> *Ibid.* at Art 2.

<sup>98</sup> *Ibid.* at Art 4.

<sup>99</sup> *Ibid.* at Art 6.

<sup>100</sup> *Ibid.* at Art 2.2, 11-12.

<sup>101</sup> *Ibid.* at Art 8.4(a), 8.4(e), 8.4(h)).

<sup>102</sup> *Ibid.* at Art 13.

<sup>103</sup> *Ibid.* at Art 15.

development” will be vital to attaining the Agreement’s goals.<sup>104</sup> Corresponding guidelines and plans have been developed through UNFCCC COP Resolutions, and related provisions are found in the Paris Agreement and the Paris Agreement Work Programme (PAWP) agreed at COP 24.<sup>105</sup> The PAWP provides a detailed set of rules to guide the enhanced transparency framework, including climate finance, response measures, the global stocktake, and compliance among others.<sup>106</sup> These cooperative measures establish a mandate for advancement of renewable energy sources furthering advancement of SDG 7.

### Relevance for Canada

By setting the target of producing 90% of its electricity from non-emitting sources (hydro, nuclear, wind and solar) by 2030, Canada has prioritized the expansion of the clean technology sector as a pathway to achieve the Paris goals.<sup>107</sup> In addition, it provides an opportunity to promote universal access to energy domestically, in particular among Indigenous communities.



SDG 7.1, SDG 7.2, SDG 7.3, SDG 7.a, SDG 7.b.



Multilateral Environmental Agreement. Canada is a Party.

### *United Nations Conventions on the Law of the Sea (UNCLOS)* Governance framework for oceans, coastal state jurisdiction

The global regime relating to oceans, the 1982 *United Nations Conventions on the Law of the Sea* (UNCLOS),<sup>108</sup> has particular significance to renewable energy production and targets 7.2, 7.a and 7.b, establishing coastal State jurisdiction for the construction and operation of offshore wind turbines or marine renewable energy generation within that coastal State’s exclusive economic zone or on its continental shelf.<sup>109</sup> The Convention also establishes a responsibility to protect the marine environment as well as rare and fragile ecosystems.<sup>110</sup> Collectively, this provides the coastal state with the right to develop marine renewable infrastructure and the responsibility to consider the environmental impact of both the installation, operation, and removal of installation. The clean energy aspects of SDG 7 in particular benefit from the clarity of territorial sovereignty and functional dispute settlement provided under the Convention. Obligations to cooperate globally and regionally, and to provide technical assistance to developing States, may further assist attainment of SDG 7.

### Relevance to Canada

<sup>104</sup> *Ibid.*

<sup>105</sup> *Ibid.*; UNFCCC, Decision 1/CP.24 “Preparations for the implementation of the Paris Agreement and the first session of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement” Report of the Conference of the Parties on its twenty-fourth session, held in Katowice from 2 to 15 December 2018, (19 March 2019), FCCC/CP/2018/10/Add.1.

<sup>106</sup> *Ibid.*

<sup>107</sup> Federal Actions for a Clean Growth, *supra* note 6, at 15.

<sup>108</sup> United Nations Convention on the Law of the Sea, opened for signature 10 December 1982, 1833 UNTS 3 (entered into force 16 November 1994), UNTC No. 31363. [UNCLOS].

<sup>109</sup> *Ibid.* at Art 56(1)(a): Coastal states have “sovereign rights for the purpose of exploring and exploiting, conserving and managing the natural resources” within certain maritime zones for economic purposes including “production of energy from the water, currents and wind”; see also *ibid.* at Art 60, 80.

<sup>110</sup> *Ibid.*, UNCLOS, Art 192, 194.



Marine renewables represent an area of opportunity for Canada. In January 2018, the Minister of Natural Resources announced the launch of \$200 million Emerging Renewable Power Program as a component of the broader *Pan-Canadian Framework*.<sup>111</sup> The marine renewables sector in Canada is empowered through the rights and responsibilities grounded in UNCLOS empowering achievement of SDG 7.2.



SDG 7.2, SDG 7.a, SDG 7.b.



Multilateral Environmental Agreement. Canada is a Party.

### ***Energy Charter Treaty (ECT) / Protocol on Energy Efficiency and Related Environmental Aspects***



Framework agreement for foreign direct investment in energy related infrastructure

Regional treaties that touch on energy, many of which contain innovative mechanisms that could be used to advance SDG 7, have grown in prominence. The *Energy Charter Treaty* (ECT) and its *Protocol on Energy Efficiency and Related Environmental Aspects* (Energy Efficiency Protocol),<sup>112</sup> European Union law, international investment agreements, and, increasingly, regional trade agreements and regional human rights treaties (and case law) are of particular relevance.

The 1994 ECT contains a broad range of obligations in support of SDG 7, including free trade in energy materials and products, freedom of energy transit through pipelines and grids, investment protections and dispute resolution measures. The promotion of renewable energy and cleaner fuels is also noted as a priority.<sup>113</sup> The primary objectives of the ECT's Energy Efficiency Protocol are to promote energy efficiency which encourages environmental benefits through adoption of a list of policy principles which facilitates SDG 7.<sup>114</sup> Practically, the Energy Efficiency Protocol has been effective at facilitating cooperation and knowledge exchange, through Working Group dialogues with States in transition that are developing energy legislation, analytical studies and voluntary country reviews. In this regard, lessons can be learned to advance targets 7.a and 7.b.

#### **Relevance for Canada**

<sup>111</sup> Natural Resources Canada, "Canada Supports Next Wave of Emerging Renewable Power" News Release (18 January 2018), online: <[www.canada.ca/en/natural-resources-canada/news/2018/01/canada\\_supports\\_nextwaveofemergingrenewablepower.html](http://www.canada.ca/en/natural-resources-canada/news/2018/01/canada_supports_nextwaveofemergingrenewablepower.html)>.

<sup>112</sup> For analysis see Stuart Bruce, 'Climate Change Mitigation through Energy Efficiency Laws: from International Obligations to Domestic Regulation', above n 4, 329-330; Stuart Bruce, 'International Law and Renewable Energy: Facilitating Sustainable Energy for All?', above n 4, 39-42.

<sup>113</sup> *Energy Charter Treaty*, opened for signature 17 December 1994, 2080 UNTS 95 (entered into force 16 April 1998), :Art 19(1)(d): States are to "have particular regard to Improving Energy Efficiency, to developing and using renewable energy sources, to promoting the use of cleaner fuels and to employing technologies and technological means that reduce pollution". [ECT].

<sup>114</sup> *Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects*, opened for signature 17 December 1994, 2081 UNTS 3 (entered into force 16 April 1998), Art 5. See also *ibid.* at Art 1: the scope and objectives of the protocol are: "the promotion of energy efficiency policies consistent with sustainable development", "fostering of cooperation in the field of energy efficiency" and encouraging economic use of energy in a manner that reflects "environmental costs and benefits"; under Art 3(2) contracting parties are required to establish energy efficiency policies and appropriate legal and regulatory frameworks which promote, inter alia: "(a) efficient functioning of market mechanisms including market-oriented price formation and a fuller reflection of environmental costs and benefits; (b) reduction of barriers to energy efficiency, thus stimulating investments; (c) mechanisms for financing energy efficiency initiatives; (d) education and awareness; (e) dissemination and transfer of technologies; (f) transparency of legal and regulatory frameworks."

Canada is signatory to the European Energy Charter (1991), and an observer under the Energy Charter Treaty. Nonetheless, Canada has declared it will apply Article 10 of the ECT regarding fair and equitable treatment of investments (non-discrimination).<sup>115</sup>



SDG 7.1, SDG 7.2, SDG 7.3, SDG 7.a, SDG 7.b.



International Agreement. Canada is an observer.

## World Trade Organization (WTO)



Covered agreements of the WTO governing international trade

International trade instruments, particularly the covered agreements of the WTO, are of increasing relevance to SDG 7.<sup>116</sup> In principle, the WTO's foundational pillars and disciplines, in particular the principles of most favored nation and national treatment,<sup>117</sup> treat the energy sector and energy goods and services like all others. In 2001, through the Doha Ministerial Declaration, WTO members noted that trade disciplines and environmental protection can be “mutually supportive” and agreed to negotiate the reduction and/or the elimination of tariff and non-tariff barriers on environmental goods and services.<sup>118</sup> In 2007, Asia-Pacific Economic Cooperation (APEC) leaders committed to “wide-ranging and ambitious actions” to contribute to greenhouse gas (GHG) reductions<sup>119</sup> and, in 2012, concretized certain of its ambitions by endorsing an agreement on environmental goods, consisting of 54 products for which tariffs would be reduced by 5% by the end of 2015.<sup>120</sup> This has mostly been successfully implemented. Since 2014, the European Union (EU) and 16 other States have been negotiating to remove tariff and non-tariff barriers to trade in environmental goods and services that contribute to environmental protection and climate change mitigation (in addition to providing economic benefits).<sup>121</sup> Renewable energy and energy efficiency products are among the environmental categories under consideration.

International investment agreements also facilitate SDG 7 through encouraging investments generally in order to promote and protect all cross-border investments, including investments made in the renewable energy and energy efficiency sectors. States agree to a range of positive and negative obligations in international investment agreements, some of which are similar to those in WTO law, which act as incentives for in-bound investments, promote stable business environments and may encourage investors with knowledge and capacity in sustainable energy to bring their experience into new jurisdictions. Additionally, certain RTAs (for example the EU-Caribbean Forum) encourage innovations to advance an economic response to climate change and

<sup>115</sup> ECT, *supra* note 112, at Art 10; See: *The International Energy Charter Consolidated Energy Charter Treaty: with related documents* (updated 15 January 2016), online: <<https://energycharter.org/fileadmin/DocumentsMedia/Legal/ECTC-en.pdf>>.

<sup>116</sup> See e.g. Markus Gehring and Marie-Claire Cordonier Segger, *Sustainable Development in World Trade Law* (Kluwer Law International, 2005).

<sup>117</sup> The principles of most favorable nation found in Art 1:1 of GATT and Art 2 of GATS, as well as national treatment found in Art 3:4 of GATT incorporate factors such as “*like circumstances*”, and if the measure places a foreign investment at a “disproportionate disadvantage”.

<sup>118</sup> World Trade Organization, ‘Doha WTO Ministerial 2001: Ministerial Declaration’, WT/MIN(01)/Dec/1 (14 November 2001), paras. 6, 31(iii).

<sup>119</sup> Asia-Pacific Economic Cooperation, ‘Sydney APEC Leaders’ Declaration on Climate Change, Energy Security and Clean Development’ (9 September 2007) <[http://www.apec.org/Meeting-Papers/Leaders-Declarations/2007/2007\\_aelm/aelm\\_climatechange.aspx](http://www.apec.org/Meeting-Papers/Leaders-Declarations/2007/2007_aelm/aelm_climatechange.aspx)> accessed (1 November 2015).


<sup>120</sup> For the list of the environmental goods see ‘Annex C – APEC List of Environmental Goods’ (Leaders Declaration, 8 September 2012) <[http://www.apec.org/Meeting-Papers/Leaders-Declarations/2012/2012\\_aelm/2012\\_aelm\\_annexC.aspx](http://www.apec.org/Meeting-Papers/Leaders-Declarations/2012/2012_aelm/2012_aelm_annexC.aspx)> (accessed 1 November 2015).

<sup>121</sup> European Commission, DG-Trade, ‘Environmental Goods Agreement (EGA): Liberalizing trade in environmental goods and services’ (8 September 2015) <<http://trade.ec.europa.eu/doclib/press/index.cfm?id=1116>> (accessed 1 November 2015).

sustainable development through the promotion of cleaner, more sustainable energy technologies.<sup>122</sup> The trade agreement signed between Chile and Colombia establishes several cooperation schemes for the production of sustainable energy, technology transfer and energy efficiency.<sup>123</sup> Similar cooperation schemes are included in the CAFTA-DR<sup>124</sup> and in the *Cotonou Agreement*.<sup>125</sup> The above-mentioned regional trade agreements provide States with an opportunity to progress on SDG 7 in the context of greater economic and trade openness, supported by capacity building, technical assistance, scientific and educational exchanges, dialogue and other measures.

### Relevance for Canada

Canada is a strong supporter of the multilateral trading system under the WTO. A majority of clean technology developed in Canada will be directed towards export markets. The covered agreements under the WTO ensure a level playing field for clean technology which supports the achievement of SDG 7.

 SDG 7.1, SDG 7.2, SDG 7.3, SDG 7.a, SDG 7.b.

 International Agreement. Canada is a Party.

### Special Note: Interfaces of SDG7 and Human Rights

The connection between human rights and energy is underdeveloped in the SDGs, since international human rights law does not yet recognise a human right to energy. This predicament is particularly relevant for the advancement of target 7.1. The SDGs Declaration generally notes that the SDGs are “grounded” in both the *Universal Declaration on Human Rights* and “international human rights treaties” and are “informed” by the *Declaration on the Right to Development* while they do not indicate how human rights interact with issues related to energy.<sup>126</sup> Additionally, the *Convention on the Elimination of all forms of Discrimination against Women* expressly requires Parties to ensure

<sup>122</sup> Economic Partnership Agreement between the CARIFORUM States, of the one part, and the European Community and its Member States, of the other part, opened for signature 15 October 2008, OJ L 289 (not in force), Art 138: Parties “agree to cooperate, including by facilitating support, in the following areas: ... (a) projects related to environmentally friendly products, technologies, production processes, services, management and business methods, including those related to appropriate water-saving and Clean Development Mechanism applications; (b) projects related to energy efficiency and renewable energy.”

<sup>123</sup> Free trade agreement between Chile and Colombia, opened for signature 27 November 2006 (entered in force 8 May 2009), Art 19.5: “The objective of the cooperation in the energy sector will deepen integration, complementation and energy development in the electric, geothermal, oil and derivatives areas, and alternative fuels. 2. For this purpose, parties shall conduct the following joint activities, which will take effect by the competent authorities in the energy sector, including, but not limited to: (a) experts exchange (b) training and capacity building (c) research (d) project development (e) promotion and facilitation of enterprise-level agreements for energy trade and investment”.

<sup>124</sup> Central America-Dominican Republic-United States Free Trade Agreement, opened for signature 5 August 2004 (entered into force 1 January 2009), Art 17.9: “the Parties have identified the following priorities for environmental cooperation activities: (g) facilitating technology development and transfer and training to promote the use, proper operation, and maintenance of clean production technologies”.

<sup>125</sup> Partnership agreement between the members of the African, Caribbean and Pacific Group of States of the one part, and the European Community and its Member States, of the other part, opened for signature 23 June 2000, OJ L 317 (entered into force 1 April 2003), Art 32(1)(iii): the Parties agree to “cooperation on environmental protection and sustainable utilisation and management of natural resources”, including in relation to “renewable energy sources notably solar energy and energy efficiency”.

<sup>126</sup> SDGs Declaration, *supra* note 2, para. 10.

that women have the right to adequate housing including electricity in the context of rural development.<sup>127</sup>

As for the gradual advancement of SDG target 7.1, regional approaches may support an implied human right to energy grounded in regional treaties, including the *African Charter on Human and Peoples' Rights* and the *Additional Protocol to the American Convention on Human Rights in the Area of Economic, Social and Cultural Rights* under the principle of “best attainable physical and mental health” standard.<sup>128</sup> Regional jurisprudence and inquiries have recognized the practical connection between energy matters and certain human rights, particularly the rights to housing and to a clean environment.<sup>129</sup> Legal action has also been brought against States through regional American human rights bodies in the context of global warming, climate change and melting ice caps.<sup>130</sup> Additionally, human rights obligations were considered in the recent landmark decision of *Urgenda Foundation v The Netherlands*, which held that the Netherlands was required to take further action to reduce its GHG emissions,<sup>131</sup> noting that regardless of the scale of emissions a State must exercise due care towards third parties.<sup>132</sup> On appeal, while the Minister of Economic Affairs had committed to closing all coal-fired power stations by 2030 at the latest, the court upheld the previous judgement noting the inadequacy of the emission reduction efforts.<sup>133</sup> As public interest litigation grows, jurisprudence may increasingly serve to interpret laws in the context of rights linked to climate change and energy and to influence the operationalisation of SDG target 7.1.

**Table 2: International Agreements and the SDGs**

| <i>Agreement</i>        | <i>Focus</i>  | <i>Link to SDG and target</i>                    |
|-------------------------|---|--|
| IRENA                   | International agency for promotion of renewable energy solutions                | <b>Goal 7, targets 7.1, 7.2, 7.3, 7.a., 7.b.</b> |
| UNFCCC / Kyoto Protocol | Stabilize greenhouse gas concentrations in the atmosphere at a level that would | <b>Goal 7, targets 7.1, 7.2, 7.3, 7.a., 7.b.</b> |

<sup>127</sup> Opened for signature 18 December 1979, 1249 UNTS 13 (entered into force 3 September 1981), Art 14(2)(h): “ensure to such women the right: ... (h) To enjoy adequate living conditions, particularly in relation to housing, sanitation, electricity and water supply, transport and communications”.

<sup>128</sup> Opened for signature 17 November 1998, 69 OAS TS (entered into force 16 November 1999), Art 10-11; opened for signature 27 June 1981, 1520 UNTS 217 (entered into force 21 October 1986), Art 16.

<sup>129</sup> Decision Regarding Communication 155/96 (Social and Economic Rights Action Center/Center for Economic and Social Rights v Nigeria), Case No. ACHPR/COMM/A044/1; *Minors Oposa v Secretary of the Department of Environment and Natural Resources* (Philippines), 33 ILM (1994) 173; *Government of the Republic of South Africa and Others v Grootboom and Others*, 2000 (11) BCLR 1169 (4 October 2000).

<sup>130</sup> Arctic Athabaskan Council, ‘Petition to the Inter-American Commission on Human Rights seeking Relief from Violations of the Rights of Arctic Athabaskan Peoples Resulting from Rapid Arctic Warming and Melting caused by Emissions of Black Carbon by Canada’ (23 April 2013); ‘Petition to the Inter-American Commission on Human-Rights Seeking Relief from Violations Resulting from Global Warming by Acts and Omissions of the United States’ (7 December 2005).

<sup>131</sup> *Urgenda Foundation v The State of the Netherlands*, C/09/456689/ HA ZA 13-1396 (24 June 2015), para 4.79: “The fact that the amount of the Dutch emissions is small compared to other countries does not affect the obligation to take precautionary measures in view of the State’s obligation to exercise care. After all, it has been established that any anthropogenic greenhouse gas emission, no matter how minor, contributes to an increase of CO2 levels in the atmosphere and therefore to hazardous climate change. Emission reduction therefore concerns both a joint and individual responsibility of the signatories to the UN Climate Change Convention. In view of the fact that the Dutch emission reduction is determined by the State, it may not reject possible liability by stating that its contribution is minor, as also adjudicated mutatis mutandis in the Potash mines ruling of the Dutch Supreme Court (HR 23 September 1988, NJ 1989, 743). The rules given in that ruling also apply, by analogy, to the obligation to take precautionary measures in order to avert a danger which is also the subject of this case. Therefore, the court arrives at the opinion that the single circumstance that the Dutch emissions only constitute a minor contribution to global emissions does not alter the State’s obligation to exercise care towards third parties.”

<sup>132</sup> See generally, *inter alia*, publications of Stephen M Gardiner, Dale Jamieson, Tim Hayward and Henry Shue; Dinah Shelton, ‘Equitable utilization of the atmosphere: a rights based approach to climate change?’ in Stephen Humphreys (ed.), *Human Rights and Climate Change* (CUP, 2010).

<sup>133</sup> *Urgenda Foundation v The State of the Netherlands*, C- 200,178,245 / 01 (9 October 2018), para 25, 76.

|                         |   |   |
|-------------------------|---|---|
|                         | prevent dangerous anthropogenic interference with the climate system  |   |
| Paris Agreement         | Nationally determined contributions, increasing ambition, country reporting in enhanced transparency framework, and facilitative compliance | <b>Goal 7, targets 7.1, 7.2, 7.3, 7.a., 7.b.</b>  |
| UNCLOS                  | International agreement governing the global oceans and establishing coastal state jurisdiction/responsibilities                            | <b>Goal 7, targets 7.2, 7.a., 7.b.</b>            |
| ECT                     | Framework agreement for foreign direct investment in energy-related infrastructure  | <b>Goal 7, targets 7.1, 7.2, 7.3, 7.a., 7.b..</b> |
| WTO and RTAs            | Covered agreements of the WTO and programs of work facilitate multilateral trade  | <b>Goal 7, targets 7.1, 7.2, 7.3, 7.a., 7.b.</b>  |
| Human Rights Interfaces | Internationally agreements relating to human rights and access to energy  | <b>Goal 7, targets 7.1.</b>                       |

## IV. Legal Preparedness for Achieving SDG 7 with Canadians

Overall, the current state of international law related to sustainable energy and energy access is underdeveloped, but it has considerable potential to advance SDG 7. International law, and particularly international policy, can be used to facilitate and accelerate change in global energy production and consumption and can steer State and non-State actors towards increased use of low-carbon energy sources. It would do so by facilitating and optimising domestic, regional and international commitments among States and non-State actors and providing a forum for dialogue and normative development. In recent years, some 164 States have adopted renewable energy targets or support policies, including feed-in-tariffs and renewable portfolio standards.<sup>134</sup> Sustainable energy measures are often used in the context of NAMAs – emissions reduction actions within domestic climate strategies – or vertically integrated NAMAs, so-called V-NAMAs, whereby sub-national actors with relevant competences are involved in planning and implementation of those strategies. Greater cognisance and incorporation of sustainable energy measures into national plans of action and development plans can support progressive implementation of SDG 7.

The objectives of SDG 7 may be advanced through a range measures and approaches including, on the one hand, continued and increasing interpretation of energy-related issues in the context of existing international law frameworks such as those discussed in this Toolkit. On the other hand, the development of new measures, such as: global product performance and sectoral standards; international energy generation, access, use and education benchmarks; globally agreed principles for sustainable energy technology sharing, transfer and licensing; international mechanisms to mobilize private and public sustainable energy finance; and comprehensive and meaningful global, regional and national monitoring, reporting and verification procedures that measure and track progressive implementation of SDG 7.

<sup>134</sup> Janet L Sawin et al, 'Renewables 2015: Global Status Report: Key findings' (Report, Renewable Energy Policy Network for the 21st Century, 2015), 7.

Integration of the SDGs into policy planning is beneficial at all levels of government. Legal preparedness for achieving SDG 7 follows a stepwise approach of adoption, consultation, implementation, and refinement.

1. **Policy formulation and outline:** Begin by adopting SDG 7 as a national, provincial and local target and establishing a commitment for development, implementation, and refinement based on a clear timeline and metrics. This often consists of a policy statement and high-level targets such as a designated percentage of protected areas by 2030.
2. **Legal preparedness assessment:** Take stock of law and governance instruments in place within and/or applicable to the jurisdiction and identify those that support the designated objective.
3. **Prioritize policy initiatives and reforms:** Engage with relevant stakeholders – governmental, civil society based, and aboriginal – to consult on prioritization of relevant programs, initiatives, and reforms. Through consultations the relevant aspects of the SDG target may be contextualized and informed by local stakeholder considerations.
4. **Legal action plan:** Identified priorities should be outlined in a formal action plan with established milestones and metrics, as well as appropriate financial resources to support the initiatives.
5. **Monitoring and refinement:** Legal and policy reform would benefit from a learning-by-doing model informed by iterative reporting and refinement. Established reporting requirements should continue to inform fine-tuning of initiative to broaden implementation.

Over time, international regulation of sustainable energy may emerge. For the moment, the absence of specific and integrated legal frameworks that support sustainable energy development may provide an impediment to concerted action. As the economic self-interest of States increasingly aligns with the objectives and desired outcomes of SDG 7 (and the other SDGs), the incentives to improve both international and domestic sustainable energy laws and regulations will strengthen. Just as international law related to SDG 7 is piecemeal, so too are the means of implementation (SDG 17). Additional research, collaboration and capacity building regarding international law, policy and governance related to sustainable energy would further contribute to this burgeoning field and contribute to the advancement of SDG 7.

## V. Recommended Resources

### Books:

Sumudu Atapattu, ed., *Human Rights Approaches to Climate Change: Challenges and Opportunities* (Cambridge: Cambridge University Press, 2016).

Marie-Claire Cordonier Segger, HE C.G. Weeramantry, eds., *Sustainable Development in International Courts and Tribunals* (Routledge, 2017).

Marie-Claire Cordonier Segger, Frédéric Perron-Welch, Christine Frison eds., *Legal Aspects of Implementing the Cartagena Protocol on Biosafety* (Cambridge: Cambridge University Press, 2013).

Marie-Claire Cordonier Segger, Markus Gehring and A. Newcombe, eds., *Sustainable Development in World Investment Law* (The Hague: Kluwer Law International, 2010).

Marie-Claire Cordonier Segger and Ashfaq Khalfan, *Sustainable Development Law: Principles, Practices and Prospects* (Oxford: Oxford University Press, 2004).

Marie-Claire Cordonier Segger and Judge C.G. Weeramantry, eds., *Sustainable Justice: Integrating Environmental, Social and Economic Law* (Leiden: Martinus Nijhoff, 2004).

Claire Fenton-Glynn, ed., *Children's Rights and Sustainable Development: Interpreting the UNCRC for Future Generations* (Cambridge: Cambridge University Press, 2019).

Alexandra Harrington, *International Organizations and the Law* (Routledge, 2018).

Hoi Kong, L. Kinvin Wroth, eds. *NAFTA and Sustainable Development: The History, Experience and Prospects For Implementation* (Cambridge: Cambridge University Press, 2015).

Armand L.C. de Mestral, P. Paul Fitzgerald & Tanveer Ahmad, eds., *Sustainable Development, International Aviation, and Treaty Implementation* (Cambridge: Cambridge University Press, 2018).

Michel Morin, Marie-Claire Cordonier Segger, Fabien Gelin, and, Markus Gehring, *Responsibility, Fraternity and Sustainability in Law: In Memory of the Hon Charles Doherty Gonthier* (LexisNexis, 2012).

Chidi Oguamanam ed., *Genetic Resources, Justice and Reconciliation: Canada and Global Access and Benefit Sharing* (Cambridge: Cambridge University Press, 2018).

Stavros Tasiopoulos, *Climate Change & International Energy Law: Renewable energy as a necessary legal instrument* (Oxford: Oxford University Press, 2018).

### Articles and Reports:

Sumudu Atapattu & Sean S. Fraser, "SDG 1 on Ending Poverty in all its Forms: Contributions of International Law, Policy and Governance," Issue Brief 2016 (CISDL-UNEP).

Stuart Bruce & Sean Stephenson, “SDG 7 on Sustainable Energy for All: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Jorge Cabrera, Frédéric Perron-Welch & Balakrishna Pisupati, “SDG 15 on Terrestrial Ecosystems and Biodiversity: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Marie-Claire Cordonier Segger, “Advancing the Paris Agreement on Climate Change for Sustainable Development” *Cambridge Journal of International and Comparative Law* 2016 Vol 5:2, 38.

Marie-Claire Cordonier Segger, “Sustainable Development through the 2015 Paris Agreement” *Canadian International Lawyer* 2017 Vol 11:2, 155.

Marie-Claire Cordonier Segger, Freedom-Kai Phillips, “Indigenous Traditional Knowledge for Sustainable Development: The Biodiversity Convention and Plant Treaty Regimes” *Journal of Forest Research* (2015) 20:5, 430.

Claire Fenton-Glynn & Pamela Sambo, “SDG 4 on Ensuring Inclusive and Equitable Quality Education: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Markus Gehring, Sean. Stephenson & Marie-Claire Cordonier Segger, “Sustainability Impact Assessments as Inputs and as Interpretative Aids in International Investment Law” *Journal of World Investment and Trade* 2017 Vol 17, 130.

Markus Gehring, Freedom-Kai Phillips & William B. Shipley, “SDG 12 on Ensuring Sustainable Consumption and Production Patterns: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Alexandra Harrington & William B. Shipley, “SDG 5 on Gender Equality: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Konstantia Koutouki & Freedom-Kai Phillips, “SDG 14 on Ensuring Conservation and Sustainable Use of Oceans and Marine Resources: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Katherine Lofts, Sharawat Shamin, Sharaban Tahura Zaman & Robert Kibugi, “SDG 13 on Taking Action on Climate Change and its Impacts: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Freedom-Kai Phillips, “Intellectual Property Rights in Traditional Knowledge: Enabler of Sustainable Development,” *Utrecht Journal of International and European Law* (2016) 32(83), pp. 1–18.

Freedom-Kai Phillips, Cameron A. Miles, Ashfaq Khalfan, & Maria Leichner Reynal, “SDG 6 on Ensuring Water and Sanitation for All: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).

Maya Prabhu, Stephanie Blakely, “SDG 3 on Ensuring Healthy Lives and Promoting Well-Being for All at All Ages: Contributions of International Law, Policy and Governance,” Issue Brief 2016 (CISDL-UNEP).



**Web Resources:**

Centre for International Sustainable Development Law (CISDL), online: <[www.cisd.org](http://www.cisd.org)>.

International Law Association (ISA), online: <<http://www.ila-hq.org/>>.

International Law Association Canada (ISA Canada), online: <<http://ila-canada.ca/>>.

Sustainable Development Solutions Network (SDSN), online: <<http://unsdsn.org/>>.

World Commission on Environmental Law (IUCN-WECL), online: <[www.iucn.org/commissions/world-commission-environmental-law](http://www.iucn.org/commissions/world-commission-environmental-law)>.

IUCN Academy of Environmental Law (IUCN-AEL), online: <[www.iucnael.org/en/](http://www.iucnael.org/en/)>.

# Annex I: Domestic Legal Instruments: Overview Table

## Federal

*National Energy Board Act*, RSC, 1985, c N-7.

*Canada Oil and Gas Operations Act*, RSC 1985, c O-7.

*Canadian Environmental Assessment Act*, SC 1992, c 37.

*Northern Pipeline Act*, RSC 1985, c N-26.

*Canada Petroleum Resources Act*, RSC 1985, c C-36 (2nd Supp).

*Canada Transportation Act*, SC 1996, c C10.

*Income Tax Act*, RSC 1985, c 1 (5th Supp).

*Canada Infrastructure Bank Act*, S.C. 2017, c. 20, s. 403

*Renewable Fuels Regulations*, SOR/2010-189

*Energy Efficiency Act*, SC 1992, c 36,

## Provincial / Territorial

### SDG 7.1

*Ontario Energy Board Act*, S.O. 1998, Ch 15 Sched B.

*Electricity Act*, SO 1998, c 15, Sched. A.

*Ontario Fair Hydro Plan Act*, 2017, S.O. 2017, c. 16, Sched. 1.

*Energy Consumer Protection Act*, 2010, S.O. 2010, c. 8.

*Environmental Bill of Rights*, SO 1993, Ch 28, Sec 51.

*Loi sur la régie de l'énergie*, RLRQ c R-6.01.

*Loi sur Hydro-Québec*, RLRQ c H-5.

*Loi sur la régie de l'énergie*, RLRQ c R-6.01.

*Loi sur Hydro-Québec*, RLRQ c H-5,

**SDG 7.2**

*Loi concernant la mise en œuvre de la Politique énergétique 2030 et modifiant diverses dispositions législatives, LQ 2016, c 35.*

*Renewable Electricity Regulations, NS Reg 155/2010.*

*Electricity from Renewable Resources Regulation, NB Reg 2015-60.*

*Renewable Energy Act, RSPEI 1988, c R-12.1.*

*Marine Renewable-Energy Act, RSNS 2015, c 32.*

*Cities, Towns, and Villages Act, RSNWT 2003, c 22.*

*Business Development Assistance Act, RSY 2002, c 21.*

*Micro-generation Regulation, AB Reg 27/2008*

**SDG 7.3**

*The Efficiency Manitoba Act, SM 2017, c 18.*

*Energy Resources Conservation Act, RSNS 1989.*

*Loi sur les normes d'efficacité énergétique et d'économie d'énergie de certains appareils fonctionnant à l'électricité ou aux hydrocarbures, RLRQ c N-1.01.*

## Annex II: About the Project

The Sustainable Development Goals (SDGs) offer Canada a unique opportunity to assess the many areas of policy innovation in which it is already excelling at the national and provincial levels, as well as to craft new, durable implementation mechanisms that will benefit Canadians and the international community now and in the future. As Canada embarks on the development of its National Strategy on the SDGs, this is a critical moment for analysis of existing laws and dialogue regarding new legal and societal avenues reflecting the SDGs.

Through “The Sustainable Development Goals for Canada: What’s Law Got to Do with It?” conference, the Centre for International Sustainable Development Law (CISDL) and its partners, along with the Sustainable Development Goals Unit at Employment and Social Development Canada and Justice Canada, engaged in a vital dialogue on the SDGs broadly, and specifically SDGs 4 (quality education), 7 (affordable and clean energy), 13 (climate action), 14 (life below water), 15 (life on land) and 16 (peace, justice and strong institutions). Overall, the SDGs are an indivisible construct of Agenda 2030, however these particular SDGs were chosen for focus at this conference because they relate to climate change, biodiversity, education and institution building, which together form the foundation of systems and issues that must be analyzed and established in order to meaningfully achieve the SDGs in Canada. This event convened local, regional and national stakeholders, academics, policy makers, lawyers and legal experts located at four sites around the country – Waterloo, Montreal, Halifax and Victoria – through a virtual meeting platform. Additionally, governmental officials and other experts not present in these locations were able to join through the virtual meeting system, allowing for further diversity in perspectives and insights.

In addition to the conference, a set of 5 SDG focused Issue Briefs have been published by the CISDL and are being shared across a number of national and international networks in order to reach a large audience of stakeholders and interested member of the public. The findings of the conference and research conducted in conjunction with it also serve as the basis for a series of new modules on the SDGs that will be offered as part of the CISDL’s Continuing Legal Education (CLE) course for members of bars across Canada. In the approximately 2 months since these new modules were announced, registrations for the CLE course has more than quintupled, indicating a strong interest in these topics among those in the legal and policy fields throughout Canada.

As noted in the conference keynote address by Ms. Janet McIntyre, Deputy Director General, Intergovernmental and External Relations Division, Justice Canada, “when Canada submitted its National Voluntary Review last year before the United Nations, Canada recognized that the 2030 Agenda for Sustainable Development is among the defining global frameworks of our time. And further, the Government of Canada strongly supports the overarching principle of the 2030 Agenda, to leave no one behind. Canada is a staunch supporter of SDG 16 and its inclusion in the 2030 Agenda marked a milestone.” These words highlight the importance of the SDGs to Canada and the need to understand the place they currently occupy in existing Canadian national and provincial law as well as the areas in which Canada can create new laws and policies that will ensure the inclusion of Canadians and serve as an example to the international community.



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