

About CCF

BCG's Centre for Canada's Future aims to be

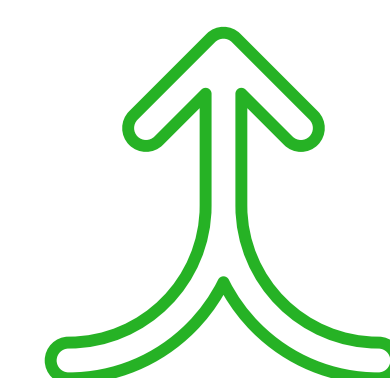
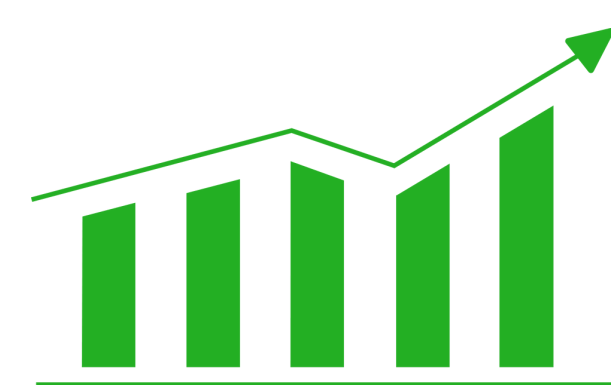
'a catalyst that helps move Canada forward.'

- Delivers the best of BCG's consulting and analytical capabilities to provide trusted expertise and insight on the issues most pressing to Canada
- Partners with Canadian organizations from the corporate, and nonprofit sectors seeking to move Canada forward
- Convenes Canadian leaders from the public and private sectors and fosters the collaboration needed to achieve impact

Skills Developed

- **Rapid ramp up:** onboarding to projects rapidly to develop expertise
- **Adaptability:** joined during a time of change with new leadership and learned to mesh with different working styles and expectations
- **Quantitative analysis:** developed modelling capabilities using excel and drew conclusions from the analysis
- **Communication:** learned to distill large amounts of information, isolate the most meaningful components, and present them in a digestible, engaging manner

Key Takeaways



Climate and sustainability work is a growing field, with ample opportunity

Aligning and communicating the business case for climate will be helpful in driving change across industries

Many intelligent, ambitious people stand behind the importance of sustainability and decarbonizing

Memorable Moments

- Attended an offsite where I had the chance to connect with other colleagues, and learn more about BCG's long term goals and ongoing work
- CN tower social dinner at 360 Restaurant with other BST interns
- Participate in BCG's Day of Care and engage with seniors at Dixon Hall
- Pottery painting case team event
- Attended a Blue Jays game with other interns and colleagues

Core Projects



Nuclear Strategy:

- Contributed to knowledge base identifying barriers and Canada's right to win across the value chain
- Developed materials for a fact pack on nuclear power, highlighting relevant processes, policy, economic opportunity and emissions reduction potential



Strategy refresh:

- Contributed to CCF's strategy redevelopment, integrating feedback from leadership and refining vision for CCF's six critical missions
- Developed content on the energy transition, where Canada stands globally, and how leading this transition can lead to prosperity for Canadians



Climate fellowship:

- Involvement in preliminary stages of an executive educational seminar for business executives who hold the decarbonization mandate in their organization
- Contributed to vision of program structure, content, and logistics in collaboration with key partners



CANZA Knowledge Centre:

- Conducted a landscape scan to develop a view of existing agricultural knowledge centres
- Utilized these centres to inform best approach to the Canadian Alliance for Net Zero Agriculture's knowledge centre

Sample Outputs

Ongoing Canadian Nuclear Efforts | Refurbishment and new builds

Five CANDU plants in operation today

- Five plants in three provinces housing 22 nuclear power reactors
- Nuclear energy produces about 15 percent of Canada's electricity

Plant Name	Installed capacity	Start of operation	Refurbishment plan
Bruce (ASB) Nuclear Generating Stations	6,232 MW	Between 1977-1979 for Bruce A and 1984-1987 for Bruce B	• Life extension refurbishment & major component replacement • Began January 2020
Darlington Nuclear Generating Station	3,512 MW	Between 1990 and 1993	• Refurbishment of four reactors at \$136 cost • Estimated completion by 2026
Pickering Nuclear Generating Station	3,100 MW	Between 1971 and 1973 for Pickering units 1 to 4 and 1983 and 1986 for units 5 to 8	• Originally set to be shut down in 2025, CHC recently gave preliminary approval for refurbishment
Point Lepreau Nuclear Generating Station	660 MW	February 1, 1983	NA

5 SMR under development in Canada

- 4 SMRs under development at Darlington by OPG in collaboration with GE Hitachi Nuclear Energy
- 1 advanced SMR at Point Lepreau planned by NB power with the support of ANC Clean Technology Inc., will generate at least 100 MW and is expected to connect to the grid by 2030

SMR designs are being advanced by competitive award

Sources: World Nuclear Association, IBC Climate Action Institute

-\$200T needed to achieve net zero; Canada can capture 1.5-3.8% of opportunity

IEA estimated annual average capital investment by decade in the NZE

Low-end estimate scenario

Scenario	% of global cap. captured	Cumulative opportunity size	Rationale/assumptions
Canada achieves its goal of net-zero by 2050 (domestically only)	1.5%	\$3T	• Canada accounts for 1.5% of global carbon emissions • Canada achieves its goal of net-zero by 2050 (domestically only)

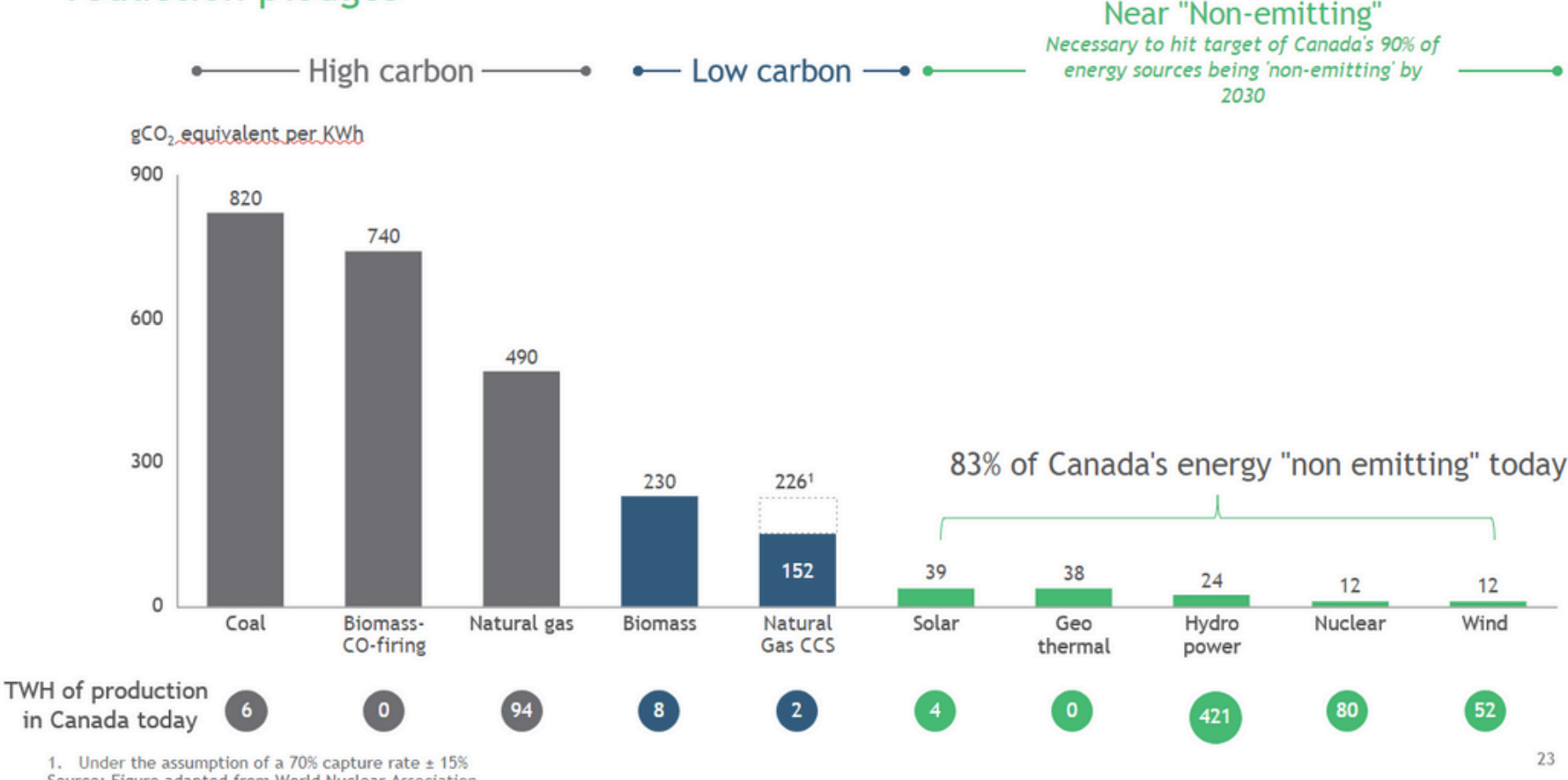
High-end estimate scenario

Scenario	% of global cap. captured	Cumulative opportunity size	Rationale/assumptions
Canada achieves its goal of net-zero by 2050 (domestically and above)	3.8%	\$7.5T	• Canada achieves its goal of net-zero by 2050 (domestically and above) • Canada continues to capture 1.2% of global trade in NZE

Capital investment in energy rises from 2.5% of GDP in recent years to 4.5% by 2030; the majority is spent on electricity generation, networks and electric end-user equipment

1. From the International Energy Agency's Net Zero Roadmap; Source: IEA, Government of Canada; World Bank; BCG Analysis

Moving towards low carbon energy sources will help achieve emissions reduction pledges



Go-forward inspiration | An "own the podium" mindset for future success

Case study: Own the Podium, 2010 Winter Olympics

Canada won more gold medals in 2010 than any nation previously ...

"I could honestly say that I would not have this thing in my hand without the Own the Podium program, quite simply."
- Scott Moir, holding the gold medal earned by himself and Tara Vireux

2010 Winter Olympics

- Bobbi Leigh Canada Skeleton
- Canadian Curling Association
- Canadian Freestyle Ski Association
- Canadian Snowboard Federation
- Hockey Canada
- Ski Jumping Canada
- Skate Canada
- Speed Skating Canada

2006 Winter Olympics

- Canadians Kaitie Humphries and Heather Whyte won gold
- Canadians Helen Upperton and Shelley Ann Brown won silver

Approach:

- Streamlined efforts to support sports with greatest chance of earning medals, prioritizing investment in sports without a clear advantage
- Investments:
 - \$120M in funding from 2005 to 2010 (+50% Federally funded)
 - \$210M in continued funding from 2010-2018
 - Equipment, sports science and nutrition support for athletes

9. From the International Energy Agency's Net Zero Roadmap; Source: IEA, Government of Canada; World Bank; BCG Analysis