



Securing economic wins through low-carbon transition: What policies for Canada?

Institute for Research on Public Policy

Rachel Samson
November, 2022

Three Key Steps

1. Make the economic case to governments and investors
2. Develop clear product and feedstock standards
3. Push for policies that drive private investment

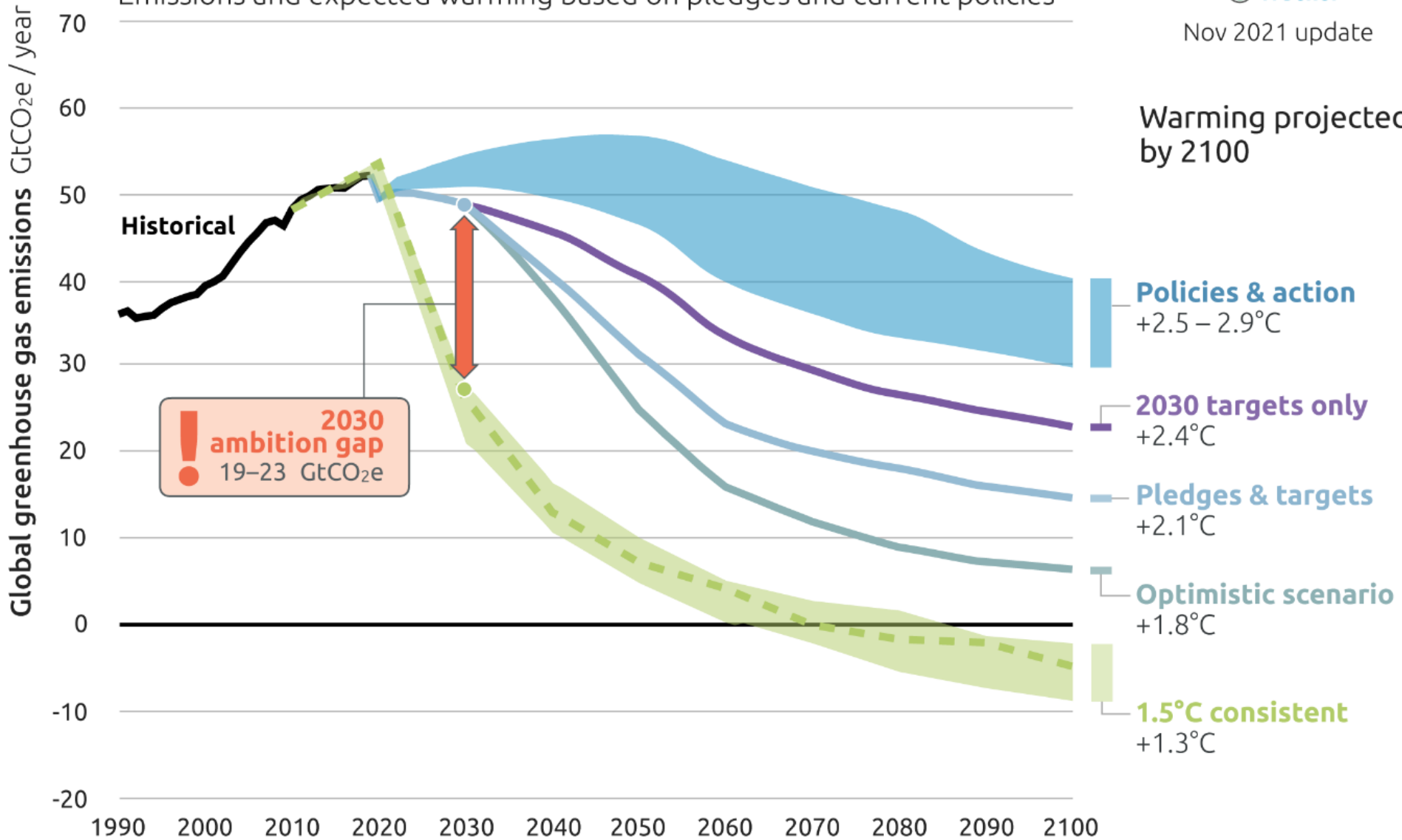


Making the economic case

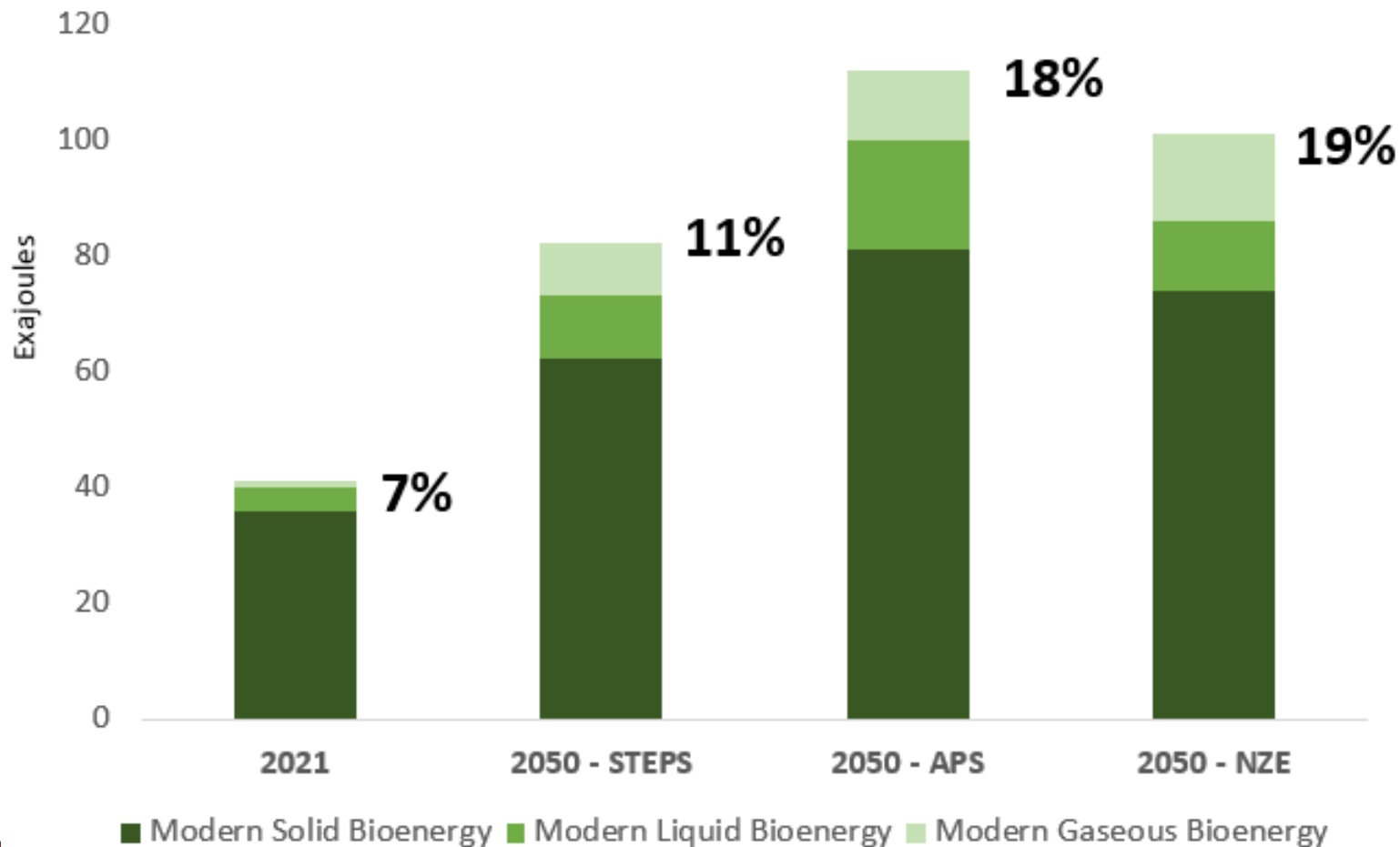
Warming projected by 2100

2100 WARMING PROJECTIONS

Emissions and expected warming based on pledges and current policies

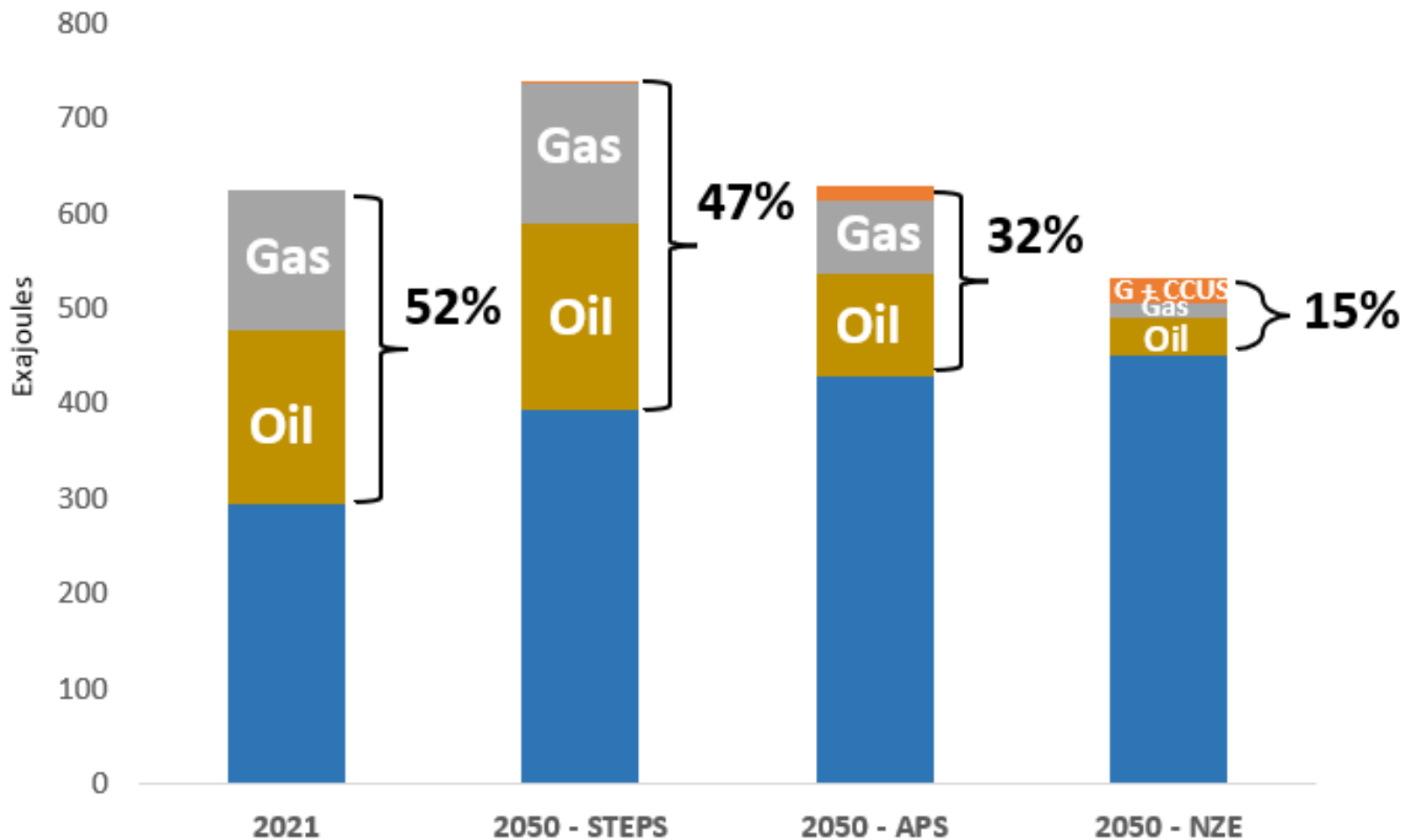


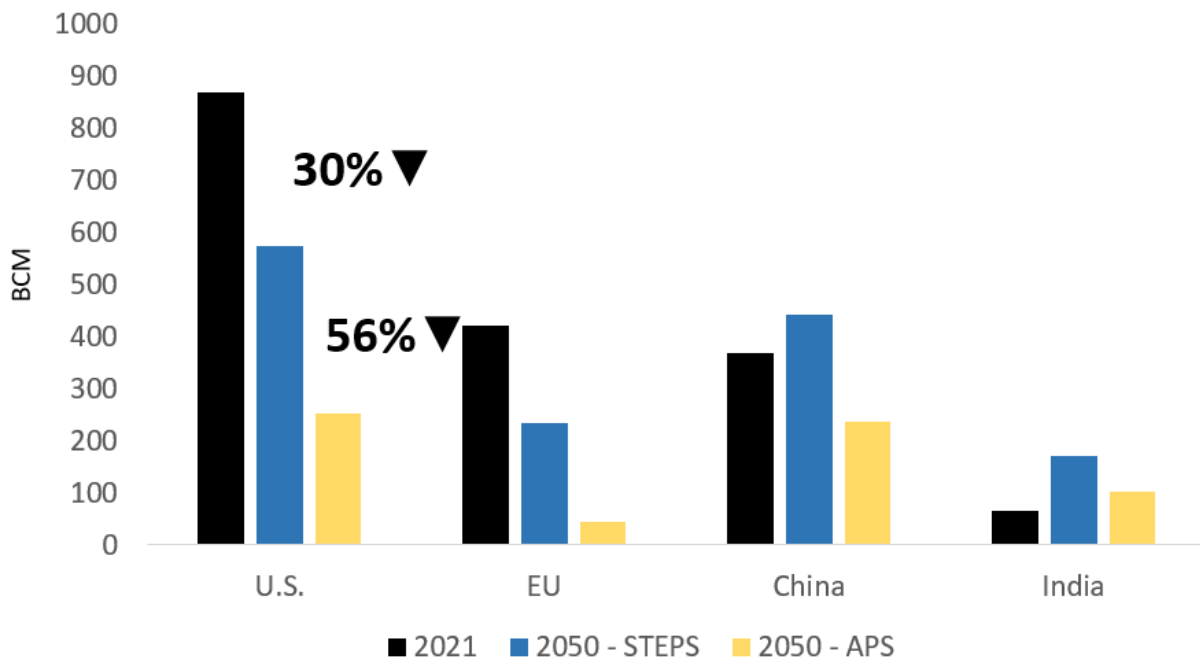
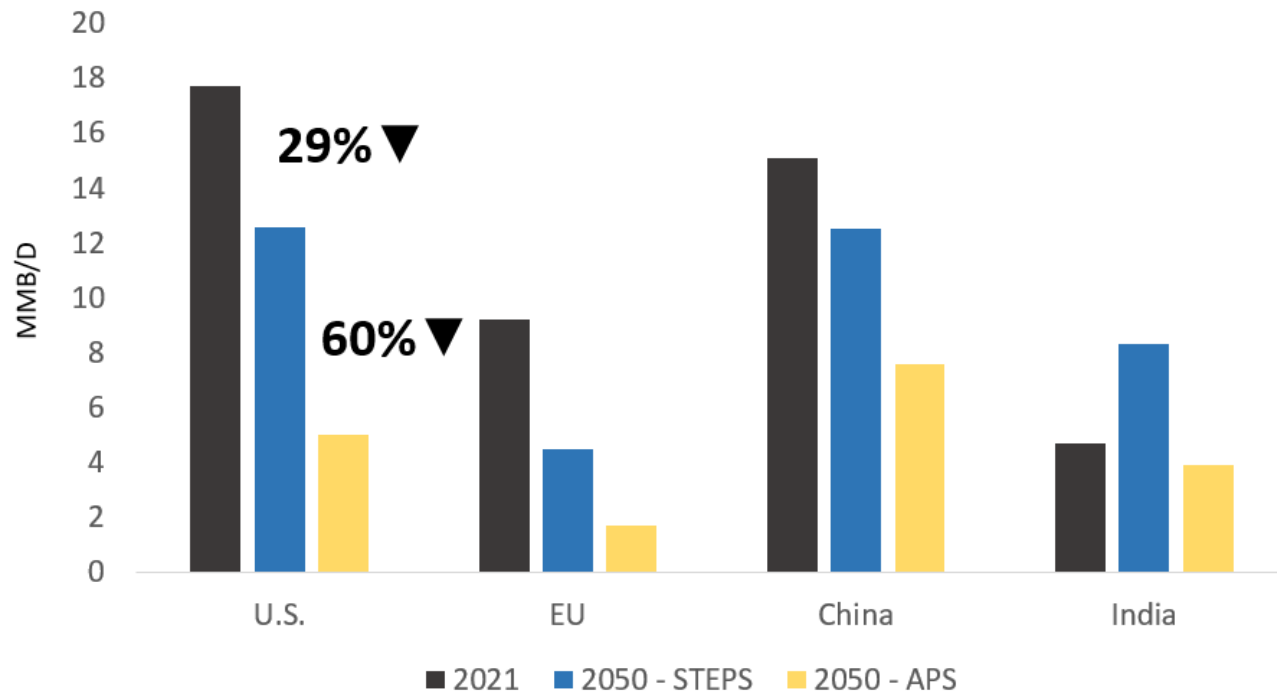
IEA Scenarios for Bioenergy Total Energy Supply



IEA Scenarios for Oil and Gas

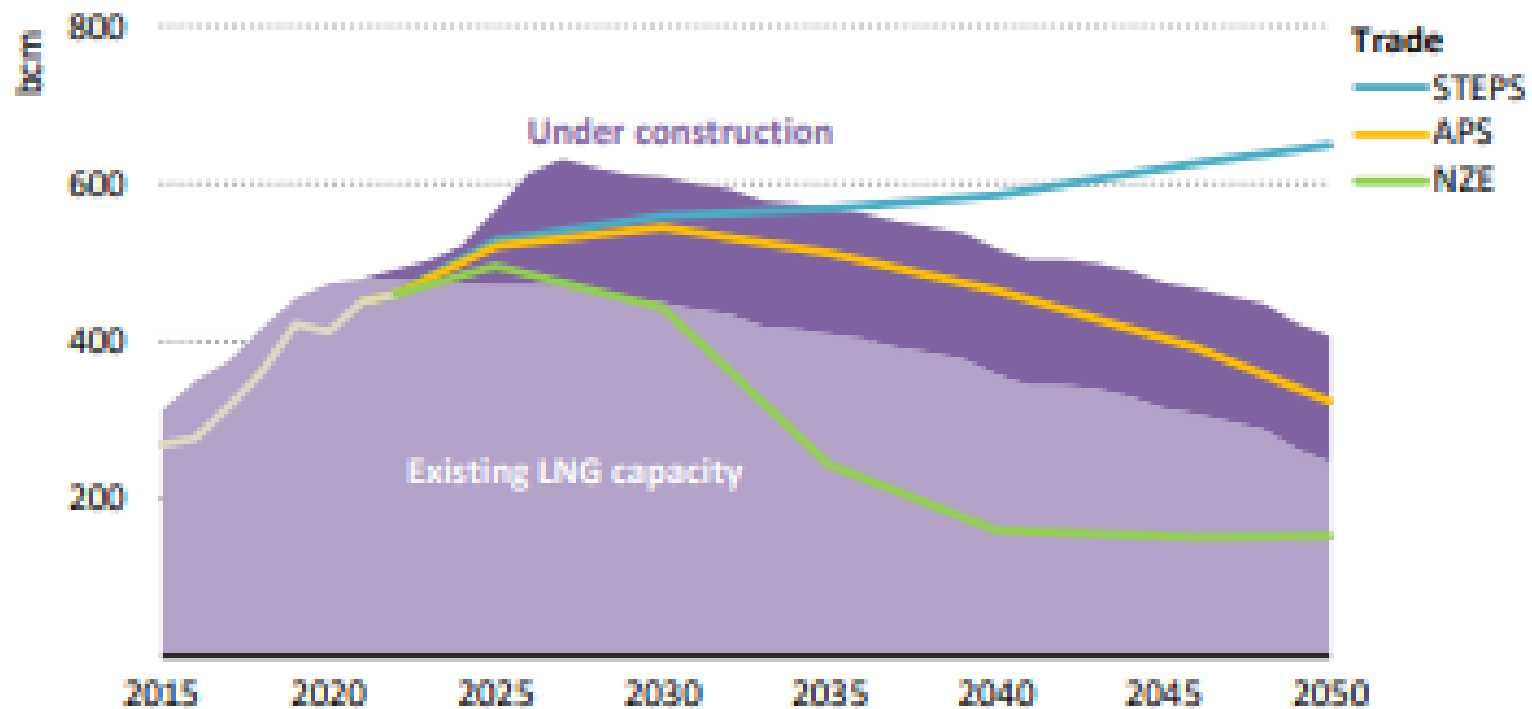
Total Energy Supply





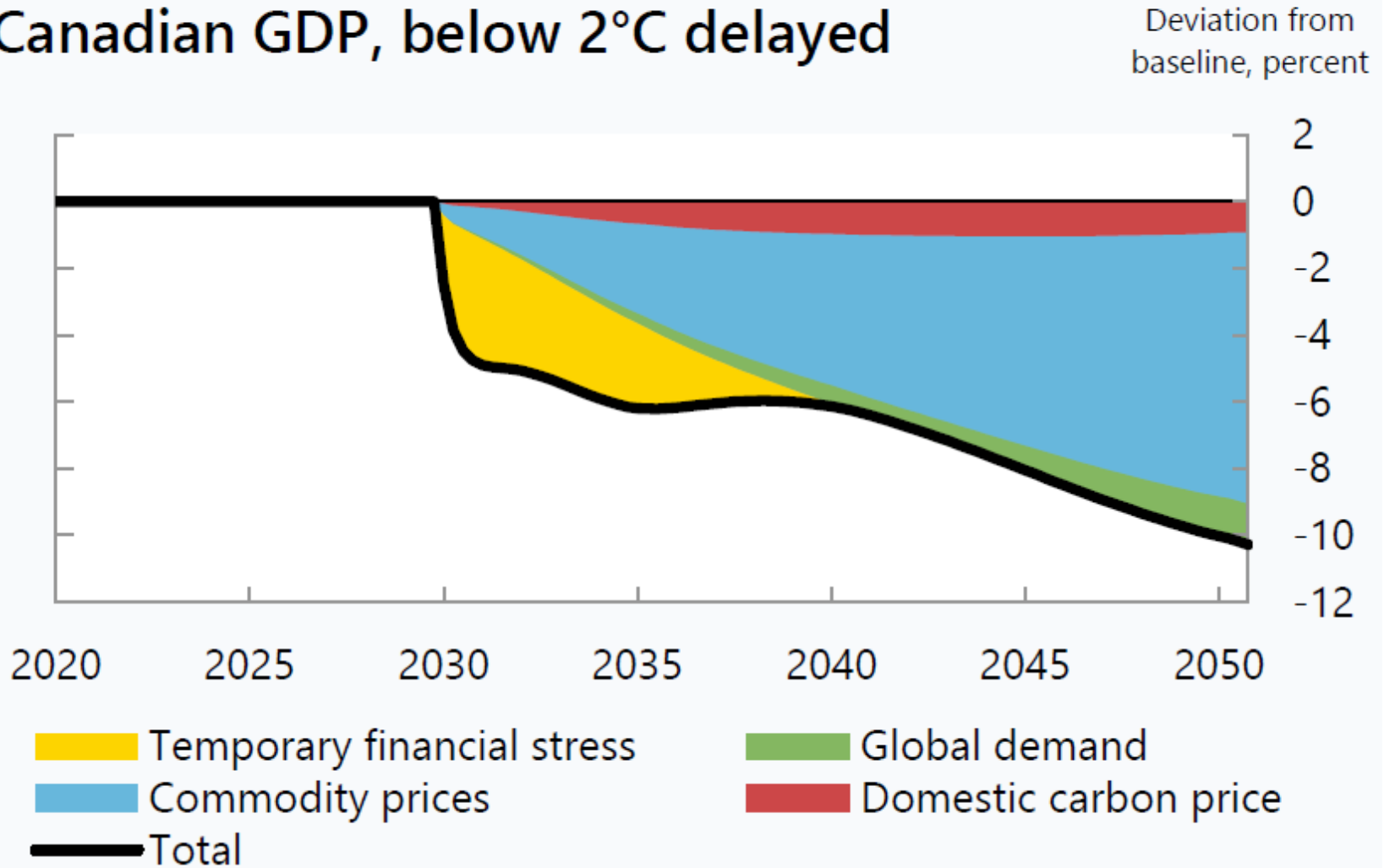
LNG construction is outpacing demand

Figure 8.8 Existing and under construction LNG capacity and total inter-regional LNG trade by scenario, 2015-2050



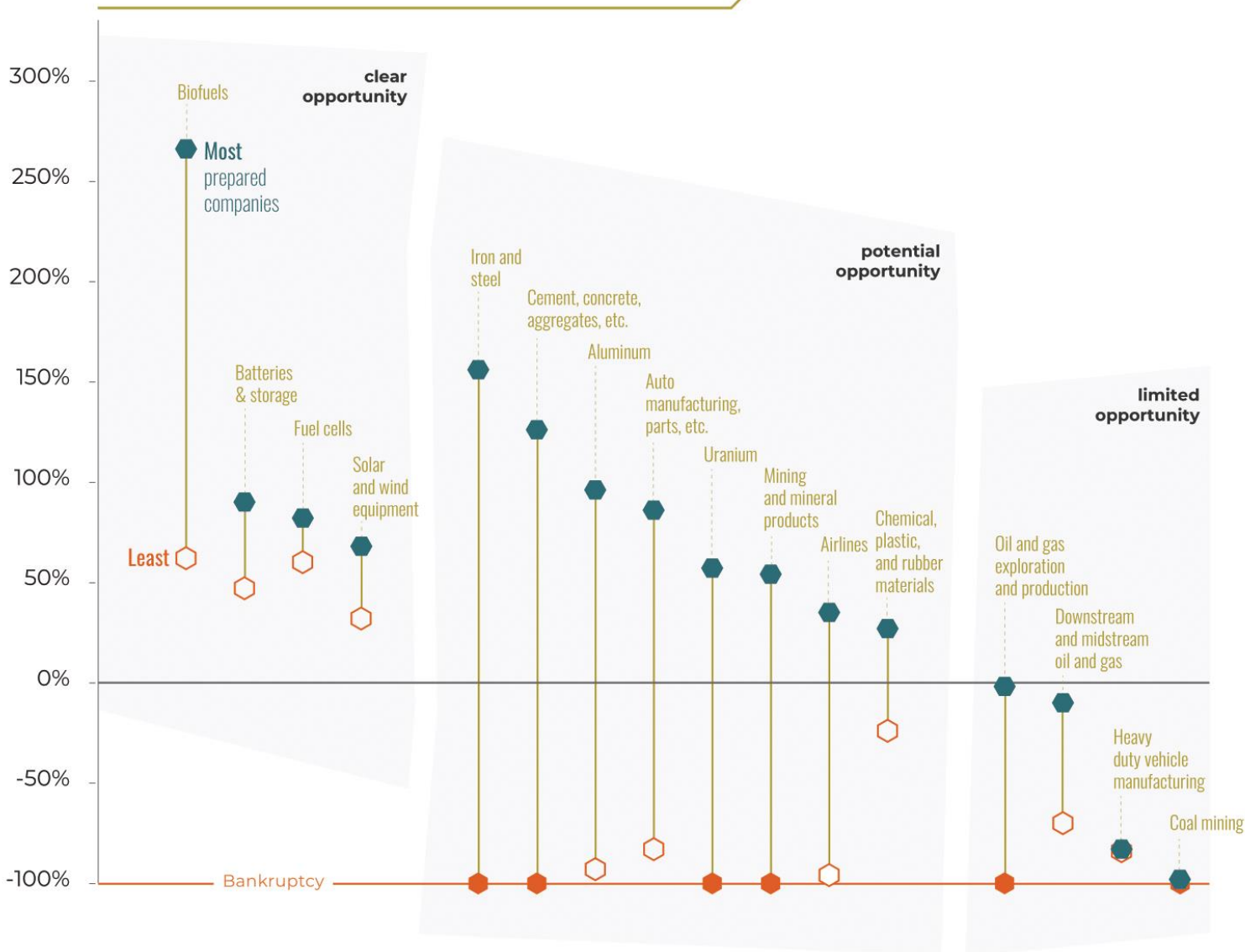
IEA. CC BY 4.0.

Chart 3-A: Decomposition of the level of Canadian GDP, below 2°C delayed

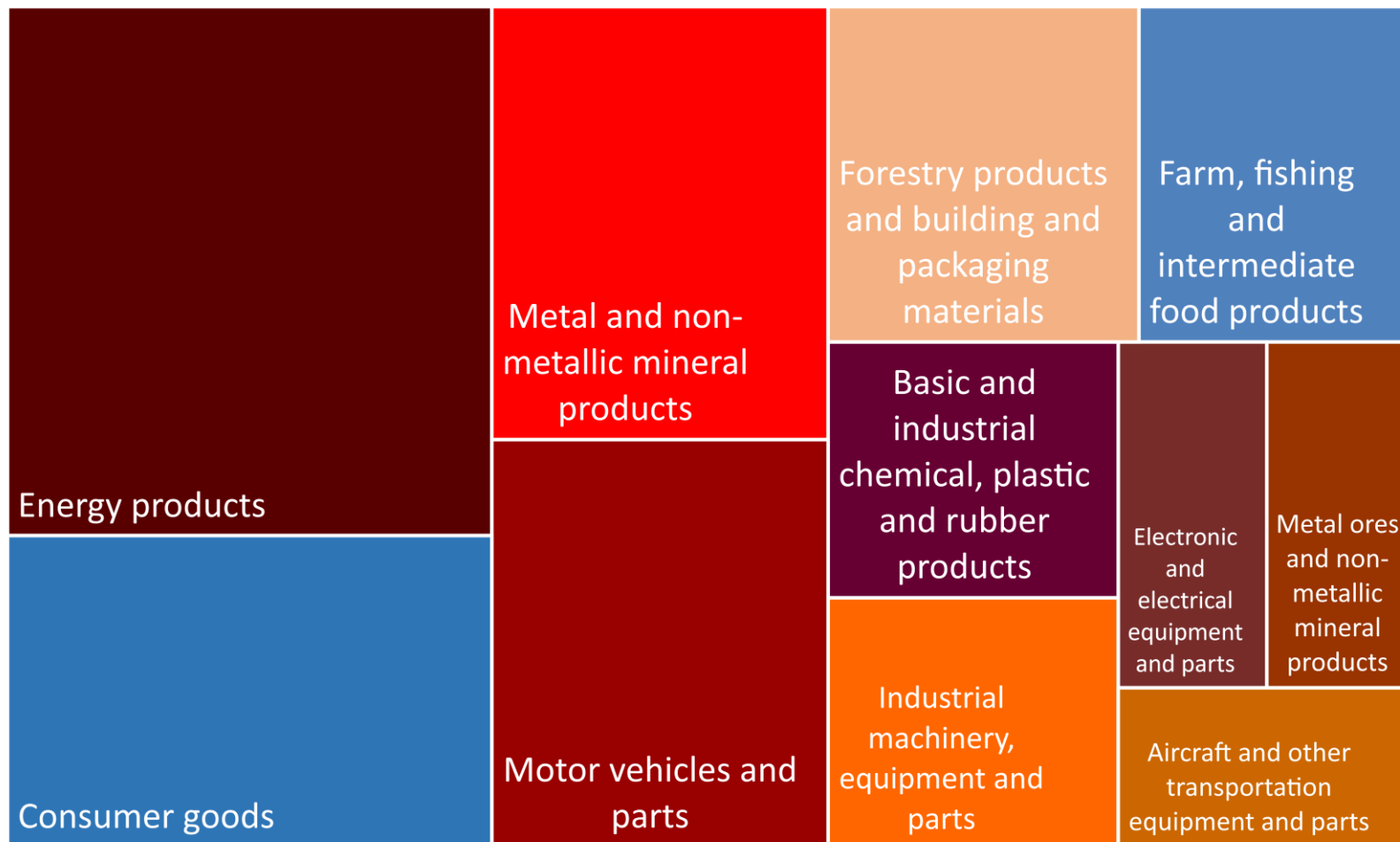


Preparation for global low-carbon transition will determine whether companies sink or swim

Impact of transition on profitability in 2050



Canada's Goods Exports by Sector, 2021 (\$B)



Global Market Potential

Product	Market Size (2028-2030)	CAGR
Biofuel	US\$ 201B	8%
Bioplastics	US\$ 46B	17%
Wood pellets	US\$ 20B	7.5%
Biopesticides	US\$ 17B	9.6%
Sustainable aviation fuel	US\$ 15B	60%
Biofertilizer	US\$ 4.4B	11%
Lab grown meat	US\$ 319M	10%



Clear Product and Feedstock Standards

Product and Feedstock Standards

- Perception of sector is only as good as its weakest member
- Concerns regarding feedstock sourcing, GHG benefits, air pollution, or Indigenous rights could dampen enthusiasm for all bio-based products
- Opportunity to get ahead of the market by establishing independent product standards

Example: Battery Passport

- **Global Battery Alliance** brings together international organizations, NGOs, industry actors, academics and multiple governments to align collectively in a pre-competitive approach, to drive systemic change along the entire electric vehicle battery value chain.
- **Battery Passport:**
 - A global reporting framework to govern rules around measurement, auditing, and reporting of ESG parameters across the battery value chain.
 - A digital ID for batteries containing data and descriptions about the ESG performance, manufacturing history, and provenance as well as advancing battery life extension and enabling recycling.
- Steering committee Co-Chaired by Tesla and **Investissement Québec** (Simon Thibault)



Policies to drive private investment

Emerging Industrial Policy

- **Clean Fuels Standard**
- **Clean Fuels Fund (\$1.5B)**
- **Net Zero Accelerator (\$8B)**
- **Canada Growth Fund (\$15B?)**
- **Innovation and Investment Agency (\$1B)**
- **Agriculture sector climate/environment (\$1B)**
- **Regional economic development agencies**
- **Provincial/territorial initiatives**

Focus on effective implementation

Canada Growth Fund

- Committed to speed, independence, transparency
- Delivered by a team of investment professionals with capital market experience
- Will absorb risks to encourage private investment in low-carbon projects, technologies, businesses and supply chains (including small and medium enterprises)
- Various investment instruments: concessional debt/equity; contracts for difference; anchor equity; offtake contracts

Sector Strategy or Gap Filling?

- Financing to develop product and feedstock “passports”?
- Matching U.S. tax credit for sustainable aviation fuel?
- Demand-side measures?
- Just transition measures?
- Trade measures?



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