CRRE June 16th
DJMc Presentation
Lost in Transition

A Decade of Obstruction

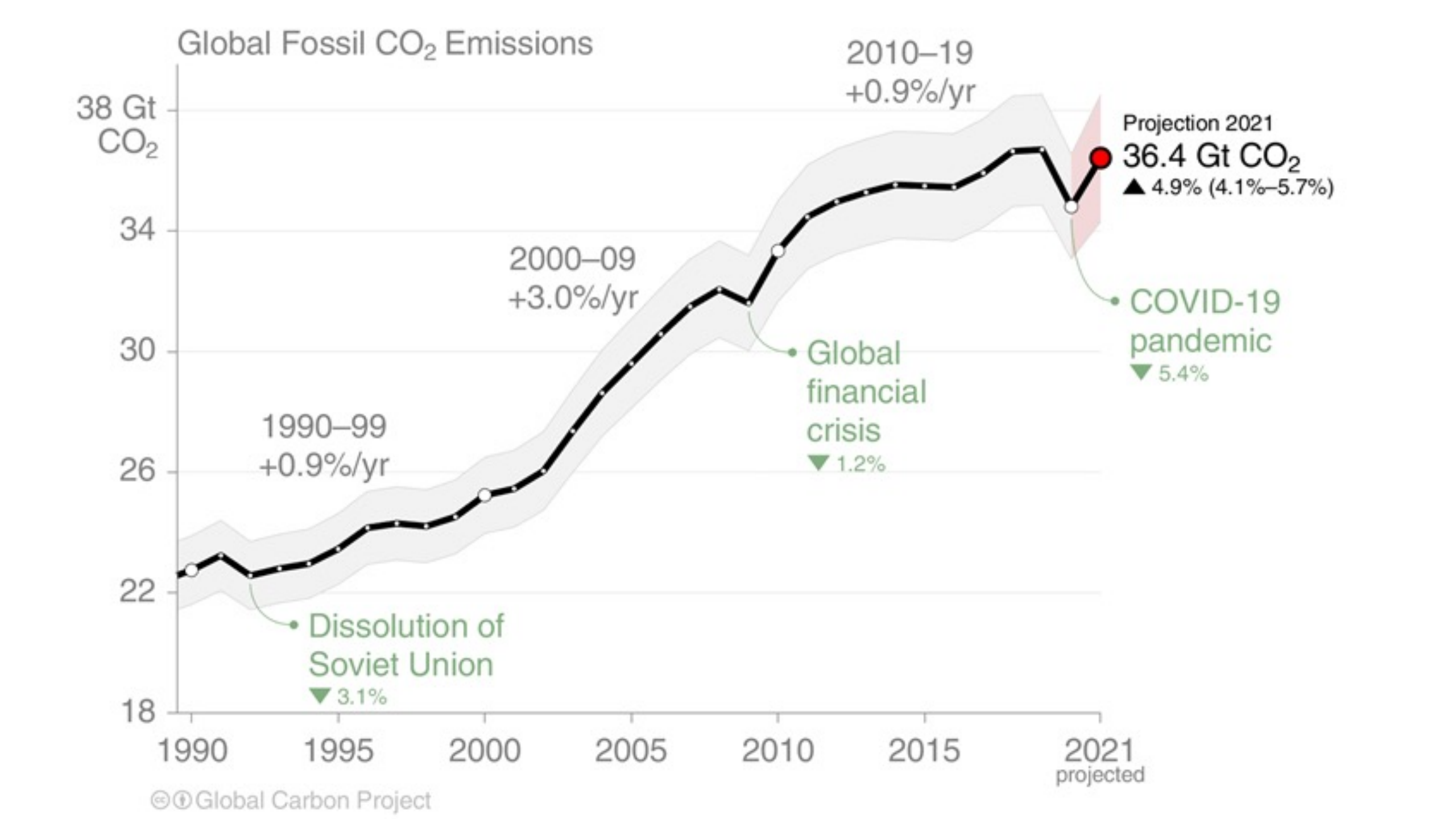
- Cash flow lost to Canada from lost hydrocarbon production and export in the hundreds of billions cumulatively over the last 10 years
  - 1.0 million barrels a day of incremental oil sands production lost when KXL or Northern Gateway not in service in 2012
    - $50 – 120/ bbl
  - Loss and delay of Canadian LNG production capacity at world scale , approaching 50 million tonnes per annum
    - $8 - 30+/ mmbtu

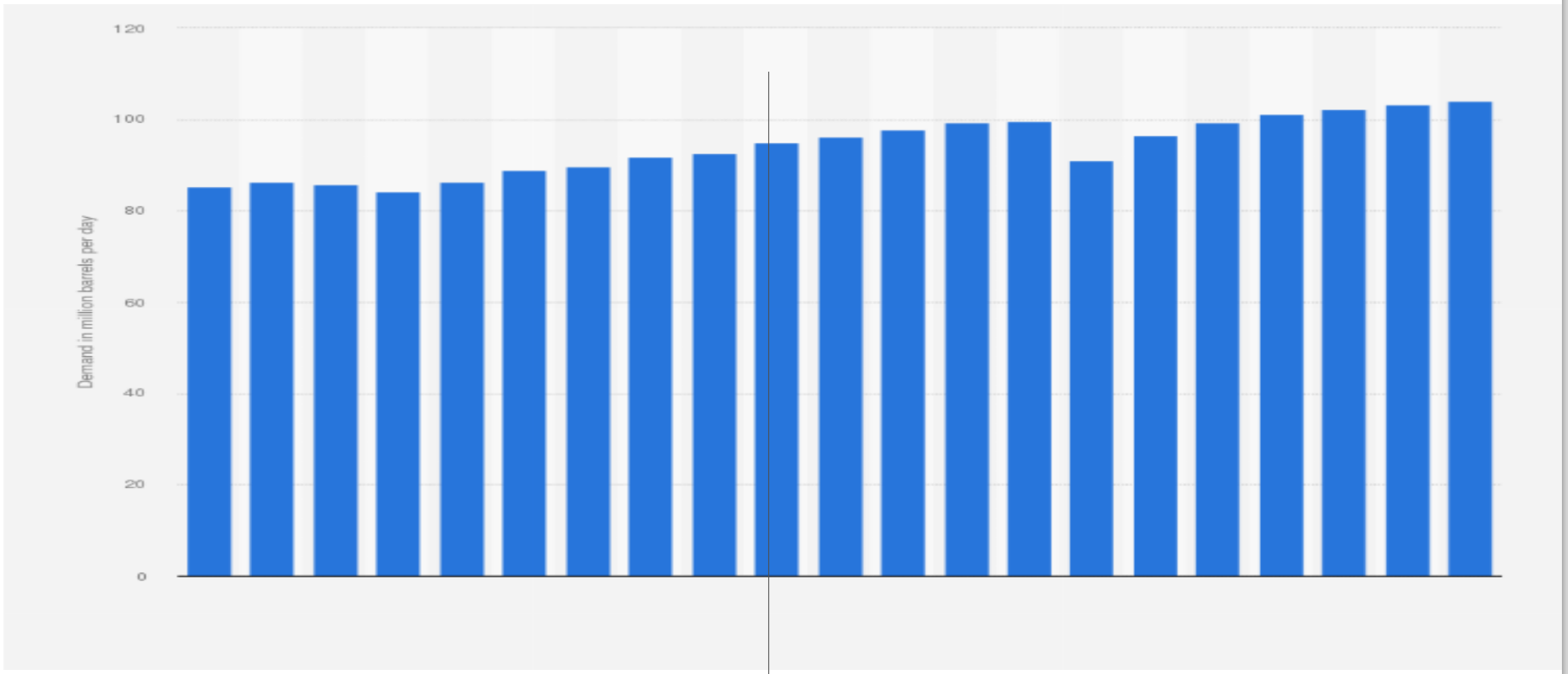
- Environmental obstruction, dysfunctional regulatory process, leftist politicos in both Canada and US

“could have bought a lot of adaptation”

A World That Cannot Give Up Hydrocarbons

- Global liquids demand is expected to peak around 102 MMBBL/D in the next two to five years
- Global natural gas demand is projected to grow by 10% in the next decade, approaching 4,500 BCM/YR
- Projected CO_2 carbon taxes, “prices”, of up to $150–$205/ton are likely insufficient to accelerate CCUS uptake
- Emissions in 2021 rebounded to historic trends alongside the global economic recovery
- 2030: 1.5°C carbon budget exceeded


Global Fossil CO_2 Emissions
38 Gt CO_2
34
30
26
22
18
1990
1995
2000
2005
2010
2015
2021
projected
1990–99
+0.9%/yr
2000–09
+3.0%/yr
2010–19
+0.9%/yr
Projection 2021
36.4 Gt CO_2
▲ 4.9% (4.1%–5.7%)
Dissolution of Soviet Union
▼ 3.1%
Global financial crisis
▼ 1.2%
COVID-19 pandemic
▼ 5.4%
Global Carbon Project



Assembled from several editions of the IEA Oil Market Report. Outlook figures are from the IEA Oil 2021 report

Cost of carbon

- A 1.5 C containment commit~~t~~ment would require in excess $200 US/ tonne carbon pricing starting immediately. How much in excess is uncertain.
- Current weighted carbon price is roughly $35US/tonne as end of 2021 globally
- Increase in average crude oil prices on the order of $ US 60/bbl from 2020 to 2022 has been equivalent to a $ US 140/tonne of CO2 carbon tax
- Current Canadian carbon tax is essentially $40 US/ tonne, with a~~n~~ stated policy intention to move to $140 US/tonne by 2030
- Current inflation exacerbated by crude oil increases and carbon taxes, climate policy

Social Cost of Carbon

- The social cost of carbon (SCC) is an estimate, in dollars, of the economic damages that would result from emitting one additional ton of carbon dioxide into the atmosphere.
- It should be the foundation of climate policy across the developed economies of the world, consistently applied and calculated with intellectual integrity especially in respect of real world discount rates.
- Carbon prices should not exceed the social cost of carbon, regardless of the implications on emissions. The only economically rational response to the climate risk.
- SCC is likely still below $ US 100/ tonne, if not still closer to $50/tonne.

What Canada should do in respect of climate policy ?

- Carbon pricing should be the only policy instrument. Full stop.
- The level of carbon pricing must be constrained by the lower of:
  - Social cost of carbon
  - Weighted average of carbon prices applicable within Canada's major trading partners, especially the United States
- All Canadian emissions are constrained by applicable carbon taxes based on this pricing formulation . Underscore "all".
- The economic incentive of avoiding carbon tax enables lower emissive investments and consumption.
- Canada liberated from explicit emission reduction targets.
- Emissions attributed to Canada should be based on Canadian consumption

Dispel Delusions

- A world that cannot impose carbon prices on itself well in excess of $200 US/ tonne is not serious about an energy transition that materially reduces hydrocarbon consumption
- Moreover, the ultimate political will to impose such a cost is dubious at best, regardless of all of the net zero aspirational commitments of most developed economies, albeit with the notable exceptions of China and India
- The world will adapt to 3C

Canada and Energy Security

- Canada's contribution to global energy security is to maximize its hydrocarbon production potential while internalizing a rational carbon tax regime, full stop.
- To accomplish that Canada will need to restore investor confidence in its basic long term commitment to such investment:
  - Repeal C69 , and potentially other open ended statutory risks
  - Provide certainty up front by government that hydrocarbon production investment is accepted , subject to subsequent regulatory conditions derived from reasonable global standards for operations and construction
  - Regulatory approvals expedited
- Exceed 5.0 million barrels of Canadian oil production
- Up to 4 world scale LNG developmets via Kitimat and Prince Rupert