

Accelerating the Transformation of North American Energy Systems: How Much Should Canada and the United States Restrict International Offsets?

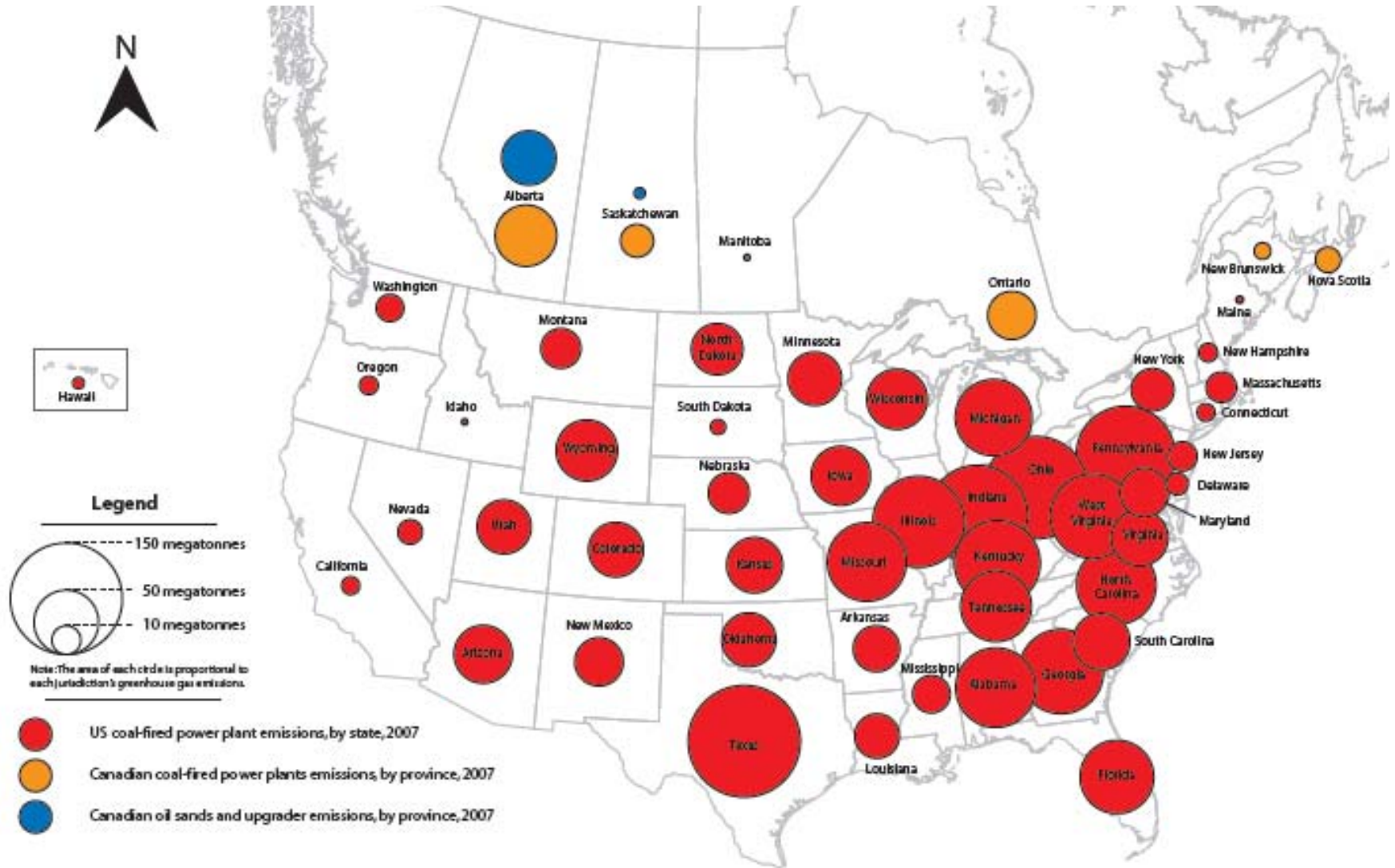
Woodrow Wilson Center Cross-Border Forum on Energy Issues

— A Canadian Perspective...Eh —

October 29, 2009

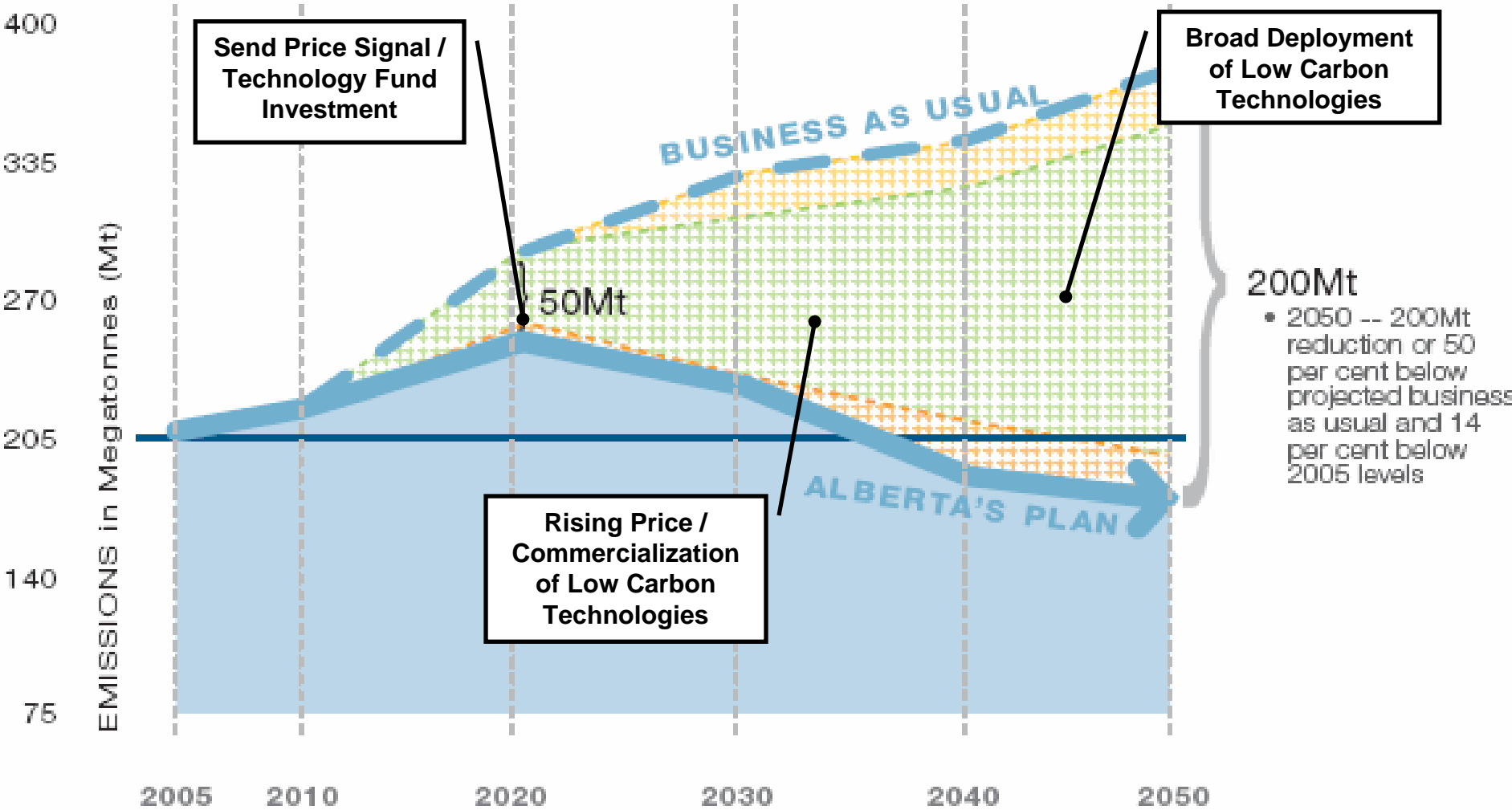
Canada and the U.S. face a common challenge




Greenhouse gas emissions from Canadian and U.S. coal fired power plants and oil sands facilities, 2007



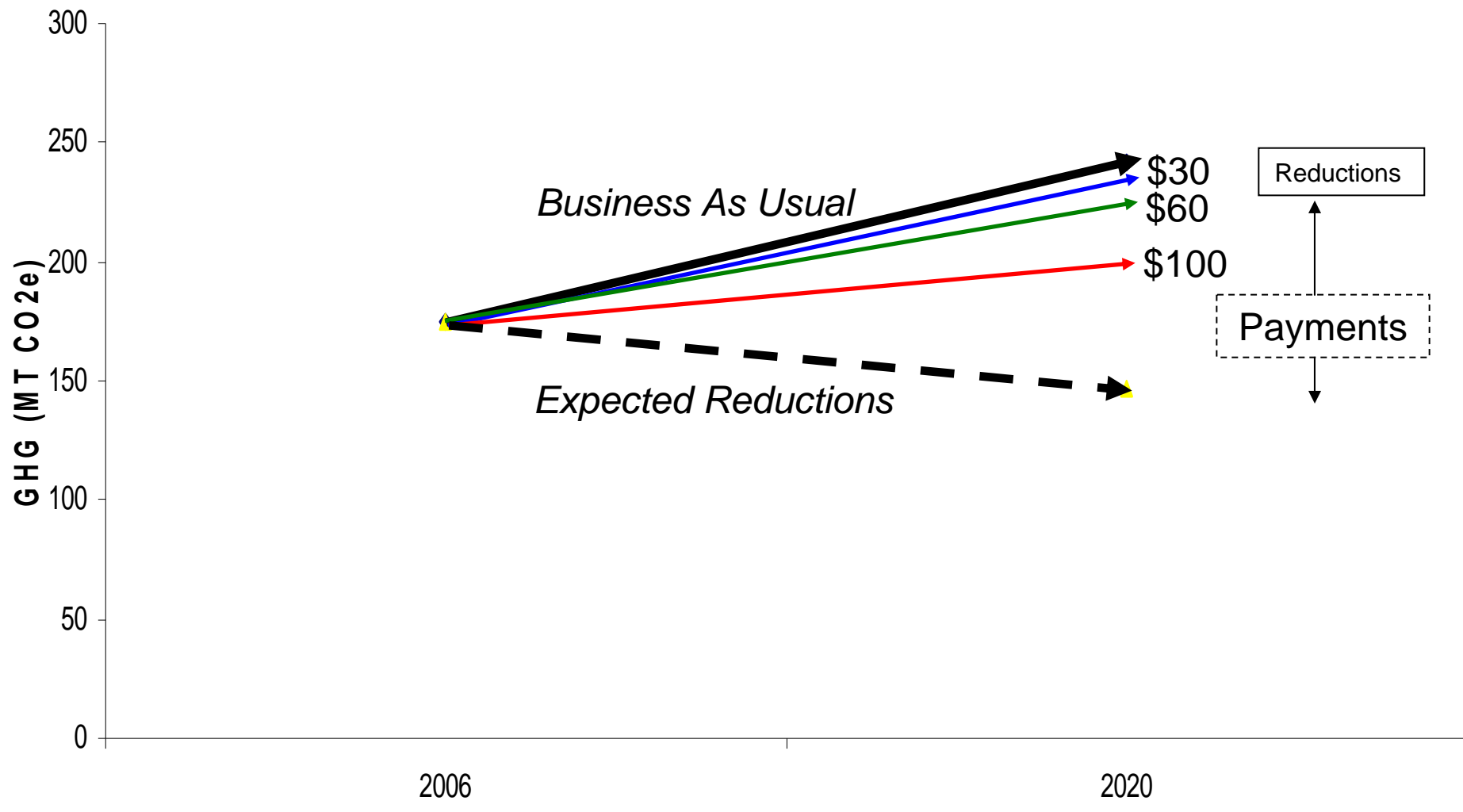
| | Legislated targets | Mandatory reporting | Policy mechanisms | Compliance |
|-------------|--|---|--|--|
| BC | 33% below 2007 levels by 2020 80% by 2050 (+ 2012 and 2016 targets) | To be proposed end of 2009 (will likely mimic WCI regs) | WCI member – proposed C&T, Bill 18 (enabling C&T legislation), revenue neutral carbon tax, carbon neutral commitment, motor and fuel standards | |
| AB | Reduce emissions intensity by 12% below projected emissions as of 1 July, 2007 (out to 2014) | >100,000 tonnes/year (reduced to 50,000 next year) | Bill 3 (SGER) - Cap and allowance | Internal abatement, offset credits, technology fund permits |
| SASK | Expected: 20% below 2006 levels by 2020 | | Regs expected in late 2009/early 2010 | Likely similar to Alberta |
| MAN | | | WCI and MGGRA member – proposed C&T | |
| QUE | | >100,000 tonnes/year (to be reduced) | Royalty on fossil fuels, WCI member – proposed C&T, Bill 42 (enabling C&T legislation), bilateral agreement on C&T with ON | |
| ON | Proposed: 6% below 1990 levels by 2014, 15% by 2020 | Draft released for comment (similar to EPA's) | WCI member – proposed C&T, bilateral agreement on C&T with QUE, Bill 185 (introduced - enabling C&T legislation) | |
| NS | 10% below 1990 levels by 2020 | | Regulated caps on electricity sector (sectors to be expanded in phase 2) | Transmission upgrade allowances, energy efficiency, RES, fuel switching, renewable energy inputs |

ALBERTA'S REDUCTION COMMITMENTS

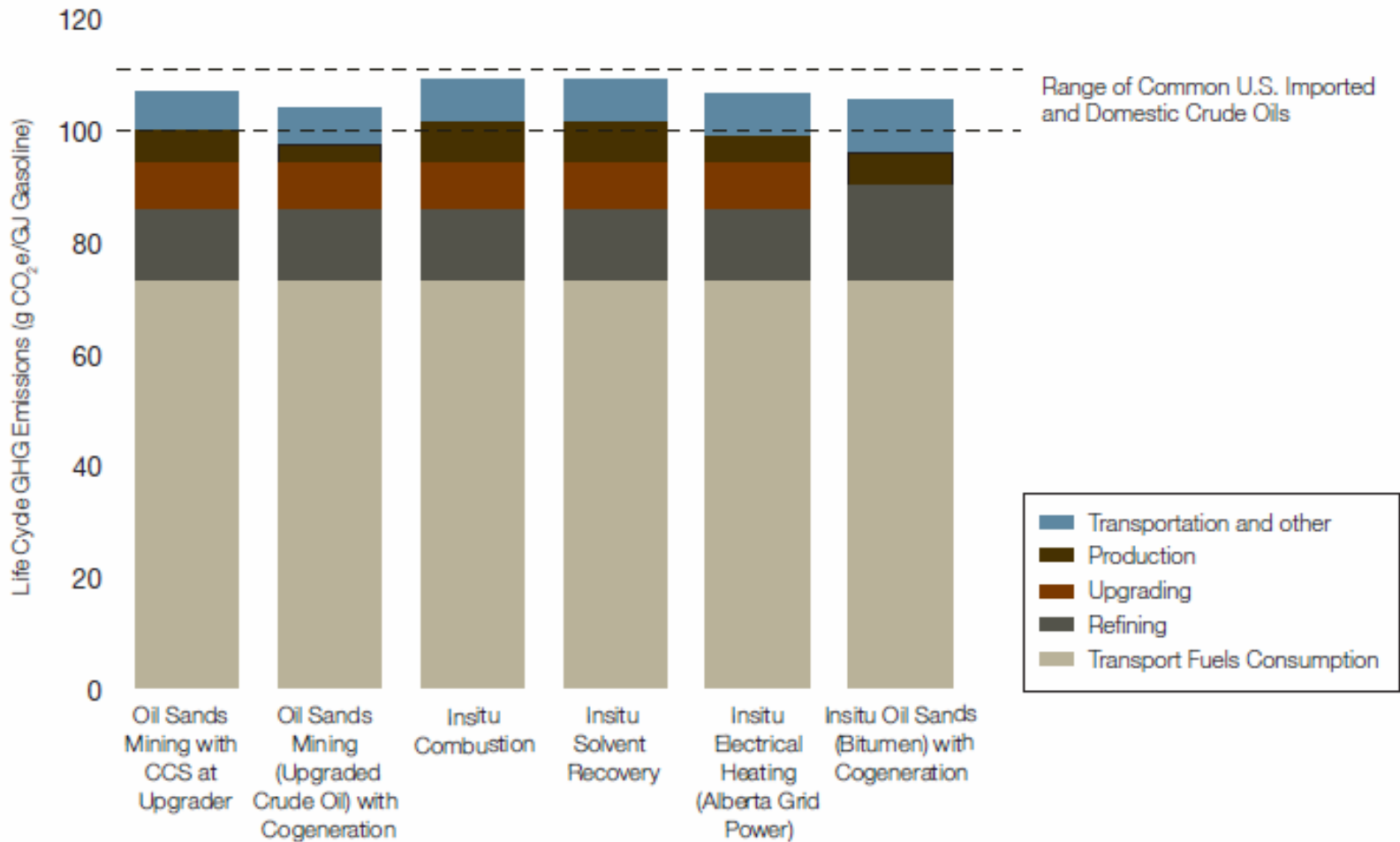


| | | |
|---|----------------------------------|--------------|
|  | CONSERVATION & ENERGY EFFICIENCY | 24Mt |
|  | CARBON CAPTURE & STORAGE | 139Mt |
|  | GREENING ENERGY PRODUCTION | 37Mt |
| TOTAL = | | 200Mt |

Alberta Industry - 2020



Lifecycle GHG emissions



Source: Jacobs Engineering, 2009