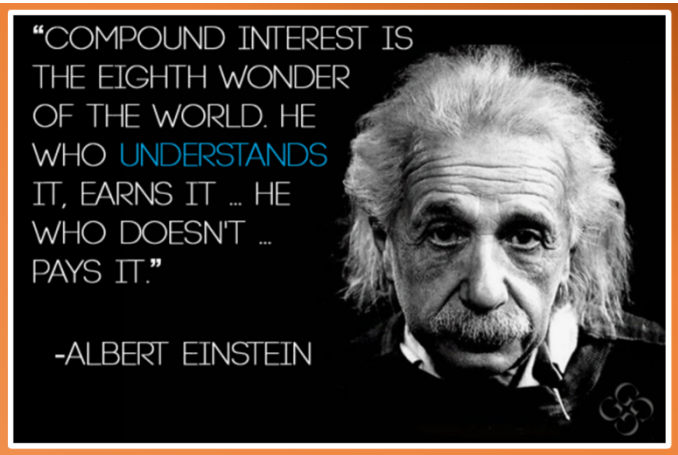
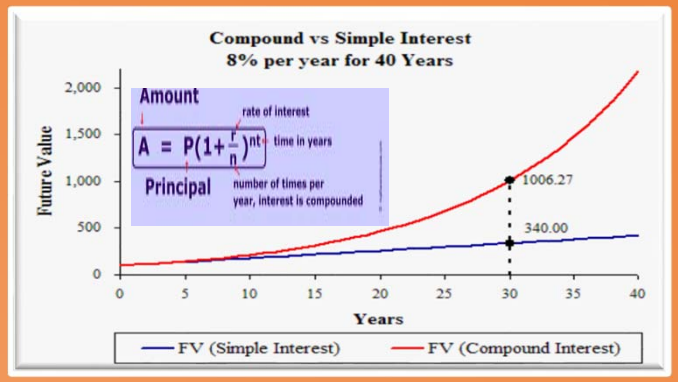
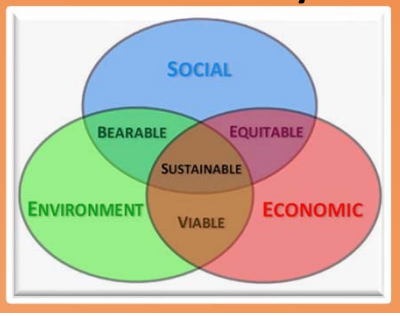
Carbon Tax and Investment Plan (CTIP)

- Uses the power of compound interest to fund the transition to 100% Renewable
- The tax revenue pays for the solutions while creating jobs
- Compound interest is fueled by displacing fossil fuels
- Lowest cost policy option
- Does not need carbon price increase to remain effective
- Integrated solution
- Mostly supply side policy for a mostly supply side problem
- Sustainable Economic, Environment, and Social Policy
- Significant new source of revenue for provinces without fossil fuels
- Revenue replacement for provinces with fossil fuels
- Stabilizes energy rates at near current levels well into the future
- Thousands of jobs during multi decade construction boom
- Fuels economic growth during multi decade construction boom
- Flexibility for each province to choose their own energy mixes
- Guaranteed to work. All variables affect only “when” the objective is achieved





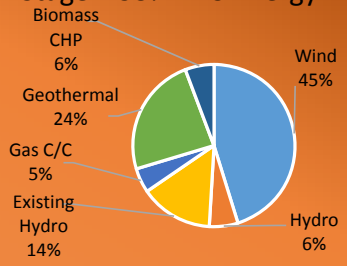
Sustainability



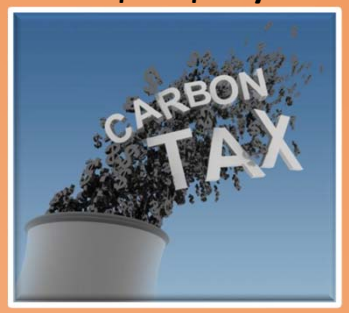
When Stage 2, 100% Renewable energy, is achieved:

- All of the generation technology will be owned by the public debt free
- Low Operations and Maintenance Cost (O&M)
- Essentially zero fuel cost
- Generating approximately **$2 Billion per year** for New Brunswick

Stage 1 95% RPS	Capacity
Hydro	1021 MW
Geothermal	644 MW
Bio CHP	489 MW
Wind	2750 MW
Natural Gas	1300 MW
Pumped Storage	100 MW
Storage (Tesla Powerwall)	1400 MW



Economy Wide Carbon Tax $15-$30 /Ton



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Public Investment

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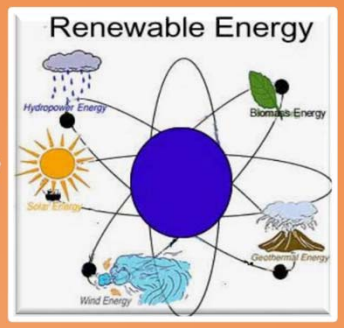


MWh

Environment Policy

Jobs **Social Policy**

$70/MWh **Economic Policy**

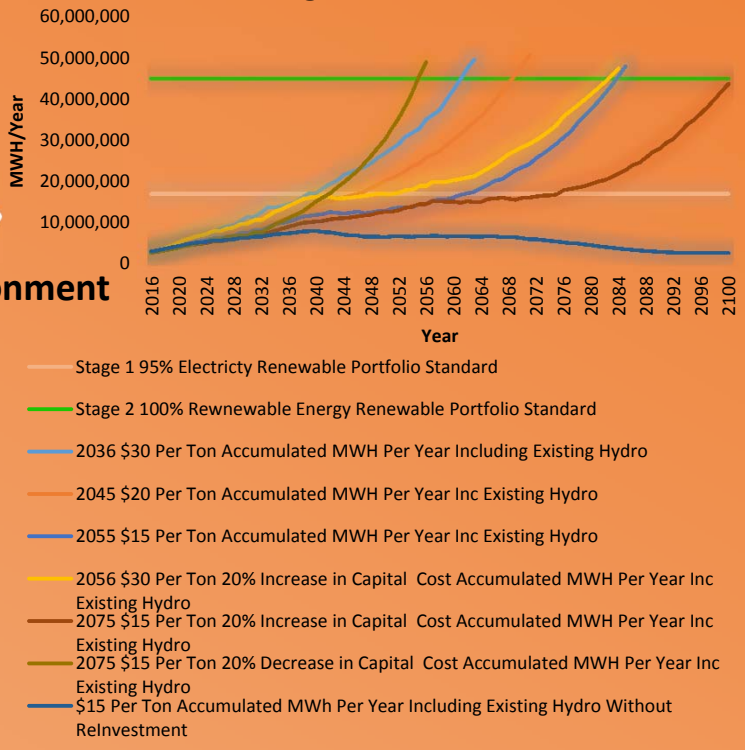
Reinvestment $/MWh= PPA-O&M

UNBSJ Professor of Economics, Dr. Rob Moir. "The concept of reinvesting in environmentally-friendlier energy production and energy efficiency to create a compound interest effect is founded economic theory. As such this policy should be considered by all provinces and not only New Brunswick."

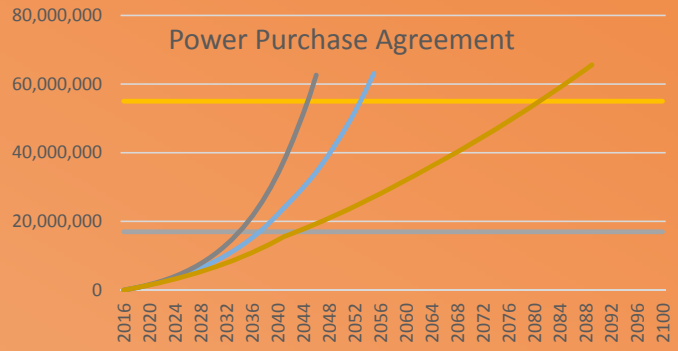
Power Purchase Agreements

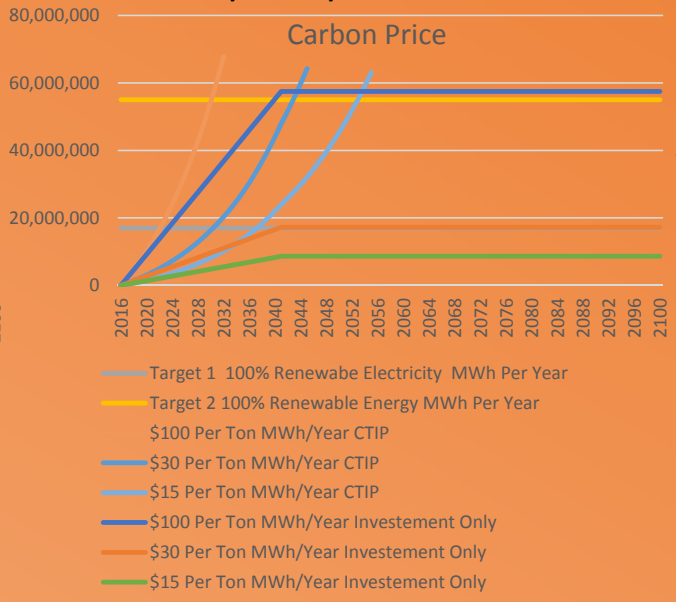
* Solar Power
* Wind Farms
* Hydro
* Geothermal

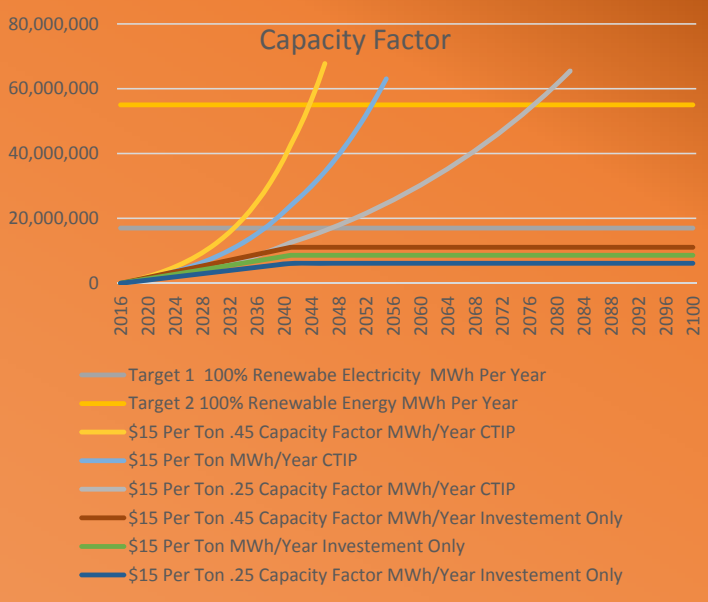
Integrated Resource Plan

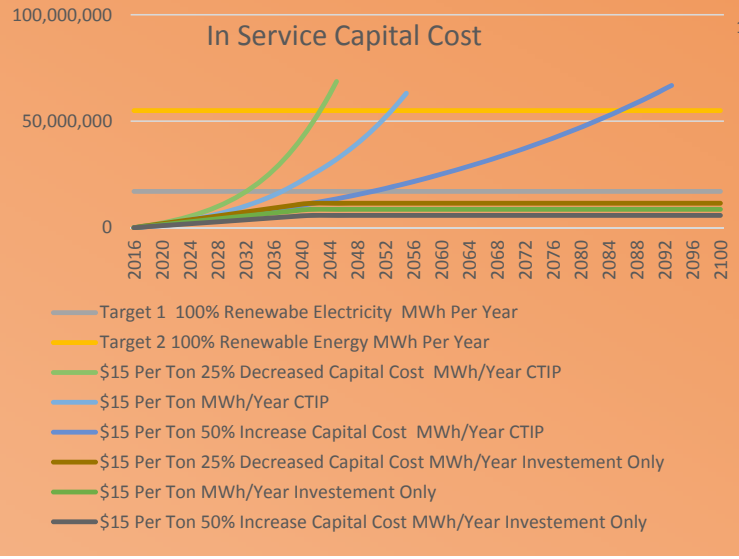


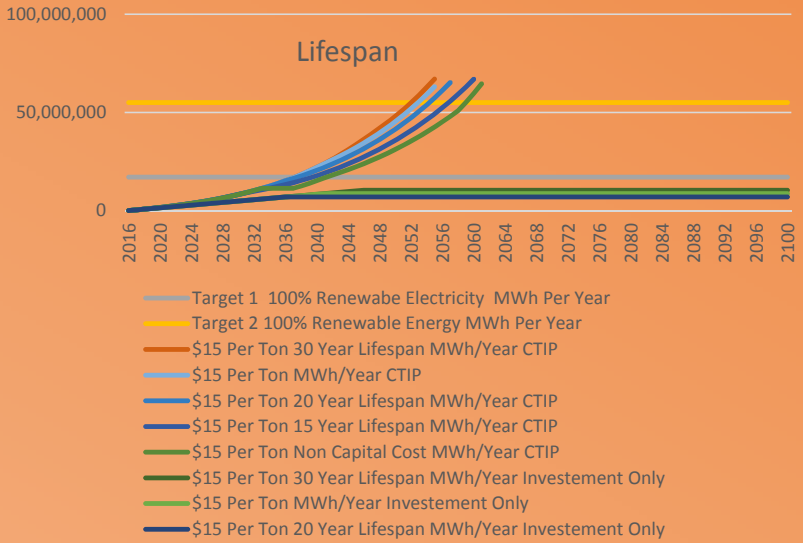
Sensitivity Analysis









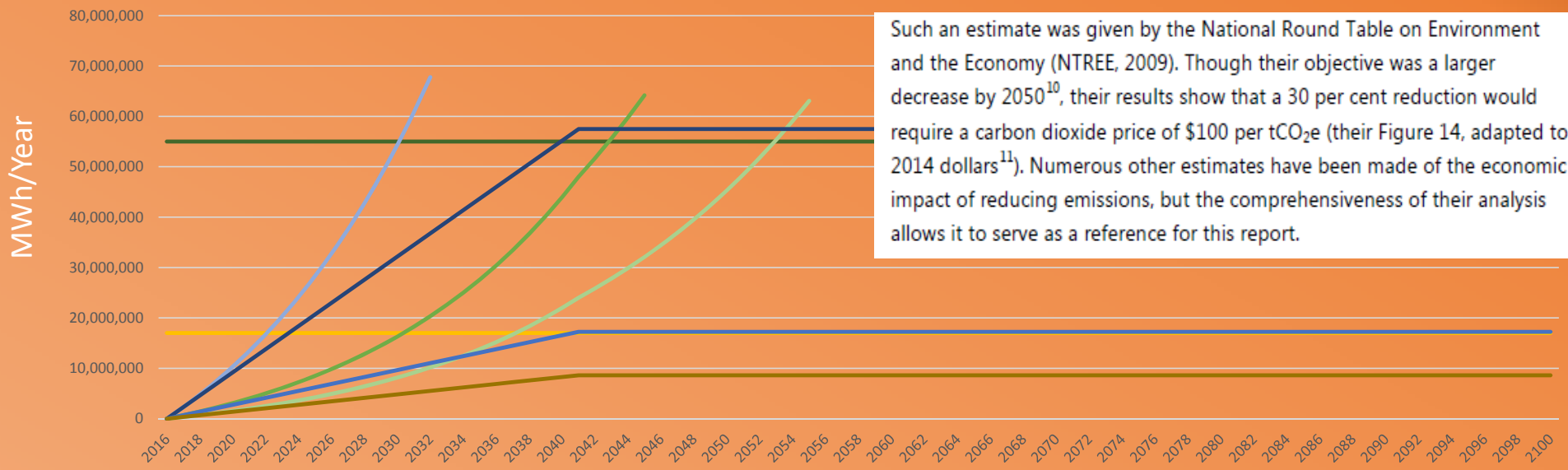


Sensitivity analysis demonstrates that the CTIP targets are ALWAYS achieved. Changes in any of the macro economic variables only changes “when” a target is achieved not “if” the target is achieved because of the exponential nature of the policy. The “investment only” modeling is linear and requires price increases to counteract any changes in the variables.

Sensitivity Analysis Policy Options

Parliamentary Budget Office April 2016 (Revenue Neutral) $100/Ton

Such an estimate was given by the National Round Table on Environment and the Economy (NTREE, 2009). Though their objective was a larger decrease by 2050[10], their results show that a 30 per cent reduction would require a carbon dioxide price of $100 per tCO_2e (their Figure 14, adapted to 2014 dollars[11]). Numerous other estimates have been made of the economic impact of reducing emissions, but the comprehensiveness of their analysis allows it to serve as a reference for this report.



- Target 1 100% Renewabe Electricity MWh Per Year
- Target 2 100% Renewable Energy MWh Per Year
- $100 Per Ton MWh/Year CTIP
- $30 Per Ton MWh/Year CTIP
- $15 Per Ton MWh/Year CTIP
- $100 Per Ton MWh/Year Investement Only
- $30 Per Ton MWh/Year Investement Only
- $15 Per Ton MWh/Year Investement Only

10-Year Plan - Rate Sensitivity / Mactaquac Cost Scenario Analysis

SUMMARY OF ANALYSIS

Sensitivity (a) - Original Fiscal Year Ending March 31 (in millions $)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Base Costs															
Average Rate Increase	2.00%	2.00%	2.00%	2.00%	2.00%	1.00%	1.00%	1.00%	1.00%	1.00%	3.05%	3.05%	3.05%	3.05%	3.05%
Capital Expenditures	277	318	273	235	251	444	775	808	1,046	1,110	955	658	492	447	246
Net Debt	4,806	4,677	4,520	4,364	4,160	4,159	4,489	4,798	5,361	5,960	6,354	6,488	6,825	6,976	6,847
% Debt in Capital Structure	90.4%	87.6%	84.6%	81.9%	79.0%	76.7%	76.3%	75.5%	76.2%	76.7%	76.2%	75.6%	78.7%	80.2%	79.9%
25% Increase in Costs															
Average Rate Increase	2.00%	2.00%	2.00%	2.00%	2.00%	1.00%	1.00%	1.00%	1.00%	1.00%	5.10%	5.10%	5.10%	5.10%	5.10%
Capital Expenditures	277	318	273	287	257	494	900	958	1,246	1,335	1,117	758	552	497	256
Net Debt	4,806	4,677	4,520	4,367	4,168	4,218	4,676	5,139	5,910	6,748	7,289	7,492	7,885	8,016	7,752
% Debt in Capital Structure	90.4%	87.6%	84.6%	81.9%	79.0%	77.0%	77.0%	76.9%	78.1%	79.1%	78.7%	78.1%	80.9%	81.4%	79.9%
50% Increase in Costs															
Average Rate Increase	2.00%	2.00%	2.00%	2.00%	2.00%	1.00%	1.00%	1.00%	1.00%	1.00%	6.75%	6.75%	6.75%	6.75%	6.75%
Capital Expenditures	277	318	273	240	262	544	1,025	1,108	1,446	1,560	1,280	858	612	547	266
Net Debt	4,806	4,677	4,520	4,369	4,176	4,275	4,856	5,489	6,438	7,500	8,176	8,440	8,904	9,088	8,668
% Debt in Capital Structure	90.4%	87.6%	84.6%	81.9%	79.0%	77.2%	77.7%	77.9%	79.5%	80.8%	80.3%	79.5%	82.2%	82.5%	79.9%
Sensitivity (b) - Smooth Fiscal Year Ending March 31 (in millions $)	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
Base Costs															