

AREA'S VISION OF RENEWABLE ENERGY IN ALBERTA BY 2020

VISION

AREA envisions an Alberta where power is supplied entirely by renewable and ecologically sound sources.

MISSION

AREA advances the deployment of renewable power through educational events, political advocacy, and support for installations.



<http://www.abrenewableenergy.ca>

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OUR GOALS

To integrate renewable energy with hydrocarbon energy, establish thousands of local diversified jobs, reduce health costs, reduce GHGs and air pollution, and advance Alberta's energy leadership on the world stage.

A PROBLEM AND OPPORTUNITY

In 2012 the Federal government approved legislation which allowed coal-fired generating units to operate for 50 years (ten years beyond the normal operating life of 40 years).

If Alberta coal units were operated under the 2012 Federal operating dates, and at the current capacity factor of 80%, GHG emissions from coal power would amount to 883 Megatonnes CO₂e during the period 2015 to 2061 (Figure 1).

TARGETS

1. **By 2025** coal-fired power generation should be phased out and replaced with 33% Renewable Generation.

Figure 2 shows the GHG emissions from coal units under various closure scenarios. If units are closed after 40 years of operation and all are closed by 2025, total GHG emissions from coal power will amount to 289 million tonnes CO₂e (67% less CO₂e than if units were operated for 50 year lifetimes).

2. **By 2020** nine of 18 coal-fired generating units (half the coal power fleet) involving 2,600 MW should be shuttered.

3. **By 2020** 3,300 MW (megawatts) of solar, wind, bioenergy, hydro, geothermal, and energy storage should be added to the electricity generation system to achieve 20% renewable generation – double the current percentage of 10% (Figure 3).

4. **By 2020** the associated investment opportunity of \$7.5 Billion will create tens of thousands of jobs in a new energy sector. The burgeoning renewable energy industry will require educational outreach to train and offer employment to students and citizens seeking to work in an exciting new industry.

5. A **20,000 Solar Rooftops by 2020** initiative should be promoted by government/s with a \$1.00 per Watt rebate, average 3 kilowatts PV (photovoltaic); \$60 million over five years will foster a \$200 million investment in the nascent solar industry and create exponential job growth (Figure 4);

These targets are ambitious and achievable and will be effective in enriching the wellbeing of all Albertans.

Figure 1

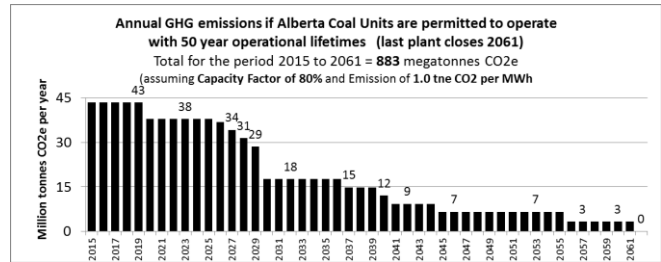


Figure 2

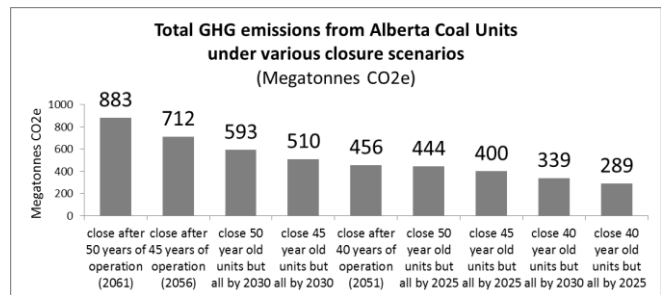


Figure 3

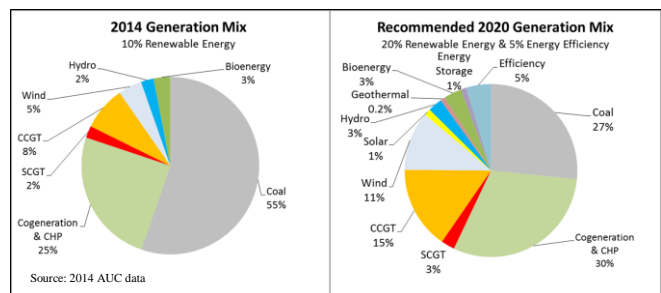
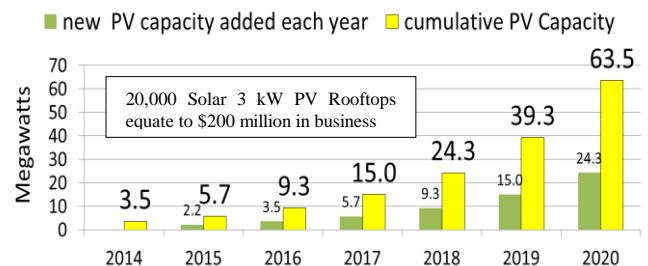


Figure 4



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