

HB 153 Renewable Portfolio Standard Sponsor Rep. Holland 1 April 2025, House Energy Committee





Introduction

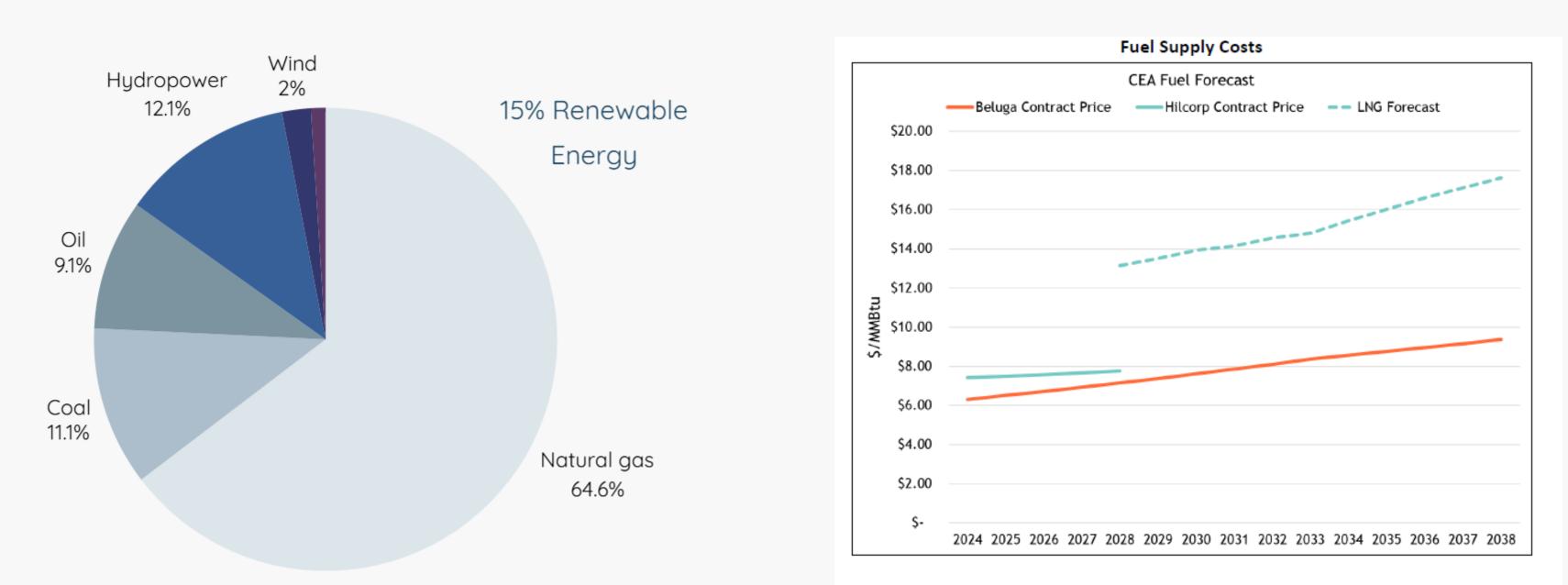


- House Bill 153 creates a Renewable Portfolio Standard, or RPS. An RPS is a requirement
 - - load...with eligible sources of renewable energy.
 - HB 153 sets the following targets:
 - 40% by 2030
 - 55% by 2035



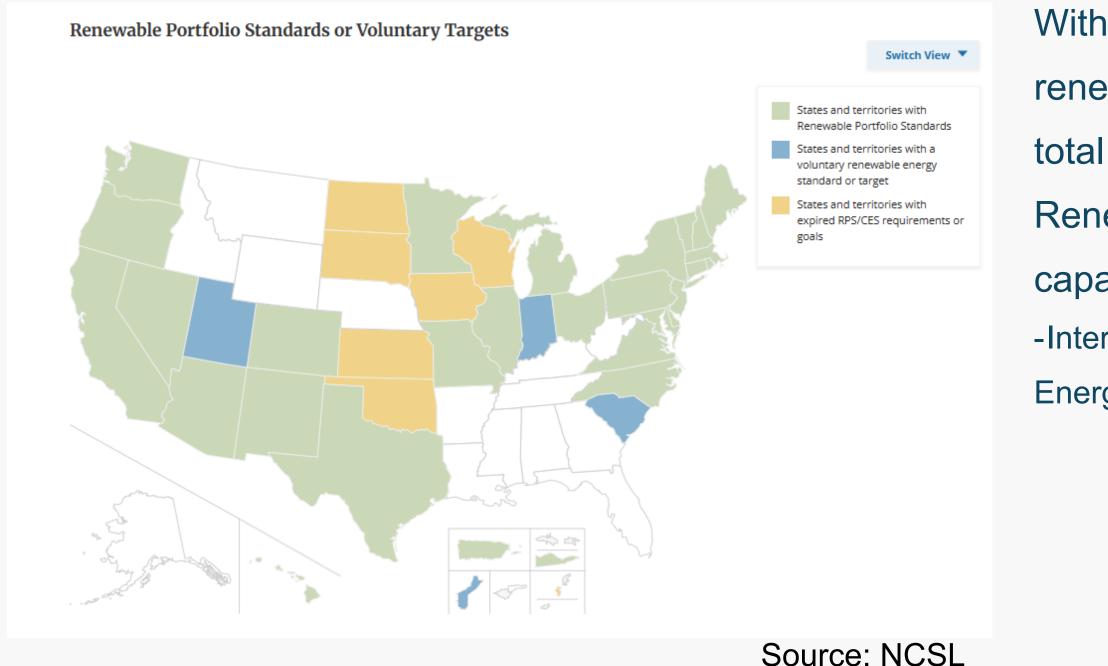
on retail electric suppliers...to supply a minimum percentage or amount of their retail

2022 Railbelt Energy Mix



The National Renewable Energy Lab (NREL) completed a study in 2024 that showed that the least cost scenario for the Railbelt would be 76% renewable energy, which would avoid about \$4.2 billion in fuel and other expenses from 2024 to 2040. This avoided cost requires renewable purchases and other costs of about \$2.9 billion, resulting in a cumulative (non - discounted) savings from 2024 to 2040 of about \$1.3 billion. https://www.nrel.gov/docs/fy24osti/85879.pdf

RPS and Energy Trends



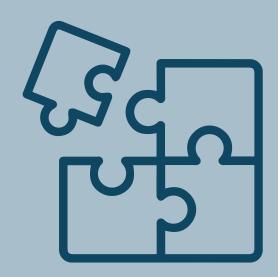
29 States + DC have a RPS, 6 states have a clean energy standard

- With 585 GW of capacity additions,
- renewables accounted for over 90% of
- total power expansion globally.
- Renewables account for 93% of planned
- capacity growth in 2025 in the U.S.
- -International Renewable Energy Agency and
- **Energy Information Administration**

Why is an RPS necessary?



Attract new investment and create competition in large scale renewable energy to reduce reliance on imported gas and lower energy costs for all Alaskans.

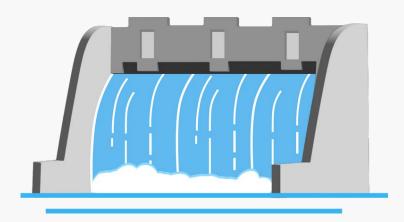


Foster a new energy economy to create jobs and economic opportunities for the next generation of Alaskans.

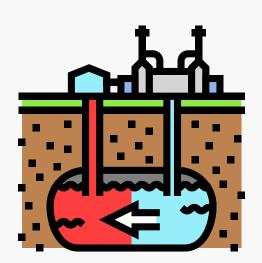


Offer incentives to maximize economies of scale, encourage collaboration, and leverage federal tax credits.

Renewable Energy Sources



Water



Geothermal











Waste to energy



- Allows utilities to meet the target through Renewable Energy Credits (RECs), which can be purchased from Railbelt utilities or PCE communities without negative impact to PCE calculation.
- **1.25x multiplier for wind projects** >100 MW installed before 2033 when energy is purchase by multiple utilities: Acknowledges projects in the queue, leverages federal energy tax incentives, fosters utility collaboration.
- 2x multiplier for distributed energy systems , from small -scale sources like solar panels, wind turbines, and batteries to encourage consumer investment.
- Allows for energy efficiency investments and distributed renewable energy systems to reduce transmission impacts.



Noncompliance Penalties & Waivers

Noncompliance fines of \$45 / MWh may be waived by the RCA:

- If the utility has entered into a power purchase agreement (PPA) before the next compliance period, begins receiving renewable electricity within two years of the prior compliance period, and files an estimate of purchased energy from said PPA with the RCA.
- For reasons outside the reasonable control of the utility including weather -related or natural disaster damage, lower than expected energy generation, global pandemics, acts of war
- Due to transmission constraints that prevent delivery of renewable electricity from a third party agreement.
- The utility otherwise establishes good cause for noncompliance.



Compliance Alternatives

- Utilities may satisfy a fine by paying a customer all or a portion of the customer's costs of installing a distributed energy system or energy efficiency technology.
- Utilities may avoid fines if they have met the 40% target by using the fine amount for future renewable projects.
- Allows exemptions if aggregate grid -wide renewable generation meets the overall standard.

Differences from previous RPS Bill

OLD: 2024 HB 121

- 25% by 2027
- 55% by 2035
- 80% by 2040

Targets

- 40% by 2030
- 55% by 2035

Compliance Mechanisms and Incentives

- Both bills allow compliance via renewable energy credits (RECs), energy efficiency investments, and distributed renewable ene rgy systems from small -scale sources like solar panels, wind turbines, and batteries located close to where the power is used.
- Both bills allow Railbelt utilities to purchase RECs from PCE communities without negative impact to their PCE calculation.
 - 1.25x multiplier for wind projects >100 MW installed before 2033
 - 2x multiplier for distributed energy systems, reducing transmission needs

Noncompliance Penalties

- Both bills allow the RCA to waive noncompliance fines for reasons outside the reasonable control of the utility or if lity otherwise establishes good cause for noncompliance.
- Both bills allow exemptions if aggregate grid -wide renewable generation meets the overall standard.
- Both bills allow utilities to satisfy a fine by paying a customer all or a portion of the customer's costs of installing a di stributed energy system or energy efficiency technologies.
- Fines of \$20 / MWh
- Includes an exemption for a utility's first noncompliance (not applicable after 2040)

- Fines of \$45 / MWh
- amount for future renewable projects



NEW: 2025 HB 153

 Utilities may avoid fines if they have met the 40% target by using the fine 10

Renewable Energy Credits (RECS)

A market -based instrument that represents the property rights to the environmental, social, and other non power attributes of renewable electricity generation. RECs are issued when one megawatt electricity is generated and delivered to the electricity grid from a renewable energy resource.

Utilities may purchase RECs to help meet targets from:

- Renewable energy from another Railbelt utility
- Renewable energy generated in a system serving a community receiving Power Cost Equalization (PCE) credits. This is meant to encourage the development of renewable power outside the Railbelt and help lower the cost of energy in PCE communities.



-hour (MWh) of

PCE Components

Sec. 42.05.910

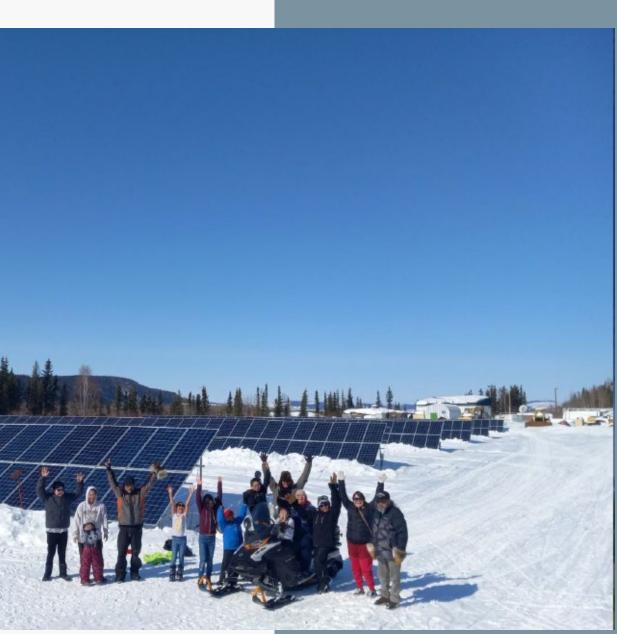
Allows PCE communities to build renewable energy projects and sell RECs to the Railbelt communities for an added revenue stream.

Sec. 42.45.110(a)

Excludes revenue from the sale of recovered heat and renewable energy credits when calculating PCE so as not to negatively impact PCE.









Sectional

Analysis









Sectional Analysis

Modifications to AS 42.05.780 – 42.45.110Public Utilities & Energy Programs

- Sec. 1 (42.05.780(a)) An Integrated Resource Plan shall include RPS options
- Sec. 2 (42.05.785(a)) New projects must be compatible with RPS targets
- Sec. 3 (42.05.785(c))-Removes renewable electric projects from pre -approval
- Sec. 4 (42.05.785(e)) Defines "renewable energy resource"
- Sec. 5 (42.05.900 42.05.925) Outlines RPSgoals: 40% by 2030, 55% by 2035
 - Compliance Incentives, Renewable Energy Credits, Noncompliance fines and waivers, Exemptions, Definitions
- Sec. 6 (42.45.110(a)) Excludes revenue from RECs or the sale of recovered heat from the PCE calculation
- Sec.7 (42.05.785(c)(3) Repeals pre-approval for renewable projects in 2030
- Sec. 8 Establishes effectivity on July 1, 2025



Section 1 - Integrated resources plans must include options by which each Railbelt utility may satisfy the renewable portfolio standard.

Section 2 - A Railbelt utility may not construct a large energy facility unless the Regulatory Commission of Alaska determines that the facility is not detrimental to a loadserving entity's ability to meet the renewable portfolio standard.





Section 3 - Establishes an exception from the Regulatory Commission of Alaska preapproval provisions for renewable energy projects that help a load-serving entity meet the renewable portfolio standard. Section 7 repeals this exception on December 31, 2030.

Section 4 - Adjusts the numbering of section 42.05.785(e) and adds the definition for "renewable energy resource" within the pre-approval for large energy facilities section.



Section 5 - Adds new article under Sec. 42.05 entitled Article 11A. Renewable Portfolio Standard (RPS). AS 42.05.900 requires a load-serving entity that is subject to the standards of an electric reliability organization (commonly "Railbelt utilities") to comply with the RPS and requires those electric utilities to diversify their current generation portfolio by increasing the proportion of MWh of renewable electricity generated, or deemed generated, that results in no less than:

- 40 percent by the end of 2030
- 55 percent by the end of 2035





Sec. 42.05.905 – Incentivizes the development of larger grid -scale wind energy projects that have greater economies of scale, take maximal advantage of existing federal tax credits and encourage utility partnerships. Incentivizes utilities to facilitate investments in energy efficiency and in renewable energy by their end -use customers. Further facilitates PCE communities to install renewable energy generation by allowing those utilities to sell renewable energy credits (RECs) to Railbelt utilities.







Sec. 42.05.910 - Governs the use of renewable energy credits (RECs). To qualify as part of a load -serving entity's portfolio, RECs must be from generation connected to the same interconnected electric transmission network. Credits can also qualify if they are purchased from renewable sources located within the service area of an electric utility that serves customers who receive PCE.



Sec. 42.05.915 – Establishes a noncompliance fine for a Railbelt utility that fails to meet the RPS, set at \$45 for every megawatt hour (MWh) that the entity is below the standard. The Regulatory Commission of Alaska (RCA) may waive fines if

- A Railbelt utility has entered into a power purchase agreement before the deadline and expects to receive the electricity no more than two years after the deadline.
- It determines that a Railbelt utility is unable to meet the RPS for reasons outside the reasonable control of the utility, as set out in (b), (c), and (e) of this section, or the entity otherwise establishes good cause for noncompliance as set out in (f) of this section.





Sec. 42.05.915 cont – Within one year after the RCA imposes a noncompliance fine, a Railbelt utility may satisfy a fine by paying all or a portion of a customer's costs of installing a distributed energy system or an energy efficiency technology. If a Railbelt utility has met the 40% threshold, then a fine that results from noncompliance of the 55% target may be avoided by instead depositing \$45 for every MWh that the is short in an RCA approved account for use by the utility to defray the cost of future renewable electricity purchases or projects.





Sec. 42.05.920 - Establishes an exemption from compliance with the RPS by Railbelt utilities if the aggregate generation of renewable electricity in an interconnected electric transmission network meets or exceeds the percentage required by the standard.

Sec. 42.05.925 - Provides for definitions used under Article 11A.

Section 6 – Amends Sec. AS 42.45.110(a) to exclude revenue from the sale of recovered heat, or revenue from the sale of renewable energy credits, when calculating PCE.





Section 7 – Establishes a sunset by repeal of section 42.05.785(c)(3), which provides an exception from the provisions of pre -approval for renewable energy projects that help a load -serving entity meet the renewable portfolio standard.

Section 8 – Establishes an effective date of July 1, 2025.







Thank you

We are happy to take questions

