



# Climate Strategy One Pager: Electricity

## Background, Focus, and Actions

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### Background

- Emission from electricity generation accounts for ~42% of Calgary's total emissions<sup>1</sup>
  - ENMAX generates/ retails much of the electricity used in Calgary and has committed to net-zero-by-2050
  - The city of Calgary owns ENMAX:
    - Other cities such as Los Angeles and Austin have utilized their utility ownership to accelerate the deployment of net-zero electricity<sup>2</sup>
    - Recent Notices of Motion<sup>3 4</sup> from council mandate "civic partners and subsidiaries" support overall net-zero by 2050
    - Overall net-zero by 2050 requires net-zero electricity by 2035 in advanced economies<sup>5</sup>
    - ENMAX has largely achieved its recent GHG target of "70% cut from 2015 levels"<sup>12</sup> by exiting its coal PPAs in 2016.<sup>13</sup> This leaves room for increased action between now and 2030
  - The federal government is moving to adopt a net-zero-by-2035 Clean Electricity Standard (CES)<sup>6</sup>
    - The Alberta NDP have stated they will also pursue net-zero-by-2035 if elected in 2023<sup>7</sup>
  - Documents such as *The Impact of Low Carbon Development* or the previous 2018 Climate Resilience Strategy do not incorporate net-zero-by-2035 electricity and do not reflect the emerging energy context
  - Rooftop solar can supply up to 8-23% of Calgary's future electricity demand if fully deployed<sup>8</sup>
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### Focus

- Incorporate net-zero electricity by 2035 in the updated Climate Strategy, with associated implications
  - Urge and support provincial and federal policy that supports the decarbonization of the electric grid
  - Maximize the amount of carbon free electricity generated in Calgary, such as rooftop solar
  - **Include upstream methane emissions in electricity related GHG emissions**
  - Partner with Indigenous communities when building new infrastructure
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### Actions

- Urge and support provincial and federal governments, AUC, AESO and other decision makers policy and actions supporting net-zero-by-2035 electricity
  - **Push provincial and federal governments for a net-zero-by-2035 CES**
- Updated Climate Strategy to incorporate and emphasize the impact of net-zero-by-2035 electricity
- **Outline ENMAX's role in Calgary's path to net-zero-by-2050.** ENMAX to:
  - Generate and retail only net-zero electricity as soon as possible, at minimum by 2035
    - Increase 2030 GHG Reduction Target to at least 50% of 2016 levels or 1.3 Mt<sup>9</sup>
  - **Include upstream methane emissions in reported GHG footprint**
  - Explicitly provide cumulative emissions for all net-zero-by-2035 pathways
  - Present a performance based, technology neutral economic analysis for any major new investments so council and Calgarians can understand ENMAX's business choices
  - Partner with Indigenous Communities for all new investments following the example of Indigenous Clean Energy Canada<sup>10</sup> projects
  - **Ensure executive compensation (such as LTIP and AVPP) is meaningfully based on performance along customer use of green, off-peak electricity and GHG reduction targets**
  - Install city-wide smart metering
    - Begin reporting demand and carbon intensity by time of use to consumers in real time
- City and all subsidiaries to, as soon as possible, build or procure new electricity generation or such that all electricity used by the City of Calgary is generated by new carbon free sources
  - Require Indigenous partnership as a procurement condition
- Amend Land Use Bylaw to standardize rooftop solar<sup>11</sup> on new commercial and industrial developments
- **Expand policies such as Clean Energy Incentive Program (CEIP) and work with ENMAX, Calgarians, and businesses to maximally deploy rooftop solar in Calgary**

# Sources

1. Calgary Climate Resilience Strategy, page 25, figure 2
2. Chapter 2, Miller, David. Solved: How the World's Great Cities Are Fixing the Climate Crisis. University of Toronto Press, Scholarly Publishing Division, October 2020
3. EC2021-1525, <https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=185516>
4. EC2021-1698
5. Table 3.2 on page 117, <https://www.iea.org/reports/net-zero-by-2050>
6. <https://pm.gc.ca/en/mandate-letters/2021/12/16/minister-environment-and-climate-change-mandate-letter>
7. <https://calgaryherald.com/news/local-news/notley-announces-plans-to-move-albertas-electricity-grid-to-net-zero-by-2035-if-elected>
8. <https://ucalgary.ca/news/rooftops-calgary-potential-solar-energy-goldmine>, up to 23% of current electricity demand, consensus is that electricity demand may double or triple with the electrification of transportation and buildings and imply 8% of electricity supplied if electricity demand triples
9. [https://www.calgaryclimatehub.ca/fast\\_fair\\_climate\\_action\\_platform](https://www.calgaryclimatehub.ca/fast_fair_climate_action_platform)
10. <https://indigenoucleanenergy.com/about/>
11. With exceptions such as green roofs
12. ENMAX 2020 Environmental, Social & Governance Report, Slide 10
13. <https://www.enmax.com/news-events/news/enmax-terminates-keephills-ppa>