
A Strategy and Six Ways to Address Community Energy Goals

Cities and businesses with renewable energy goals need a way to reach them



INTRODUCTION AND PURPOSE

Many Colorado cities have ambitious energy goals but no practical and cost-effective way to reach them. Over one million Coloradans live in cities with the goal of obtaining 100% of their electricity from renewable energy sources. Many large companies also have aggressive renewable energy goals. This paper reviews six possible solutions that would allow cities and large companies to reach their energy goals. Each approach requires state-level legislative and regulatory action.

This paper also suggests a process to move forward. Change requires that decision-makers at the state level (Legislators, Public Utilities Commissioners, and/or the Governor) initiate a process to evaluate the options, identify the best approach, and then bring it into existence. To be widely accepted, the process must be transparent and must invite input from a broad variety of stakeholders, including cities with energy goals, business interests, environmental and consumer advocates, utilities, independent power producers and marketers, and the general public.

Author:	Larry Miloshevich (larry@EnergyFreedomCO.org)	November 2018
Affiliation:	Energy Freedom Colorado – a volunteer, non-profit, research and advocacy group	
Downloads:	EnergyFreedomCO.org (full paper; executive summary; one-page brief)	
Photo:	Mike Lewinski	

The primary intent of this paper is to provide city leaders, lawmakers, regulators, large energy users, and stakeholders of all types with background information on six possible ways that communities could exercise more choice and control over the energy sources used to produce their electricity. The six approaches focus on cities and companies that are served by investor-owned utilities (IOUs); however, options are also described for those served by electric cooperatives ("co-ops") and municipal electric utilities.

Readers who are less interested in the details of the six approaches are invited to read only the Executive Summary and Conclusions sections, or download the one-page brief. Those who wish to dig deeper are provided with an extensive reference list.

CONTENTS

1. Executive summary	3
2. How Coloradans get their electricity: The three utility types	7
3. Six ways that cities could reach their energy goals	9
3.1 Community Choice Aggregation (CCA).....	9
3.1.1 CCA as implemented in California	12
3.1.2 CCA in a fully competitive state – Illinois	14
3.2 Community Energy Act (HB18-1428), with improvements	17
3.3 Municipalization – when a city takes over its electricity system	20
3.4 Utility-provided 100% renewable electricity for everyone.....	23
3.5 Green tariffs – adapting programs for large corporations to cities.....	27
4. What about electric co-ops and municipal electric utilities?.....	32
5. Conclusions – an inclusive stakeholder process led by decision-makers.....	38
• A legislative interim committee (or other lawmaker-led forum)	
• A Governor's select committee on community and corporate energy options	
• An investigatory docket at the Public Utilities Commission (PUC)	
6. References.....	40

1. EXECUTIVE SUMMARY

This paper reviews six possible ways that communities could address ambitious renewable energy goals, some of which also apply to large businesses with energy or sustainability goals. The paper recommends a public stakeholder process, led by state level decision-makers, to evaluate the options and determine the best solution(s).

A growing list of Colorado communities have committed to obtaining 100% of their electricity from renewable energy sources – solar, wind, hydro, geothermal – including (as of this writing): Denver; Pueblo; Pueblo County; Boulder; Fort Collins; Lafayette; Longmont; Breckenridge; Summit County; Nederland; and Aspen [1]. Denver's goal of 100% renewable energy** by 2030 [2,3] is an interim goal of its Climate Action Plan to achieve an 80% reduction in greenhouse gas emissions by 2050 [4]. Active campaigns in Colorado that may lead to additional such commitments in the future include: Jefferson County; several Metro Denver cities; Durango; Grand Junction; Manitou Springs; and others. Many large companies, some with a Colorado presence, also have 100% renewable energy goals [5].

The problem:

Over one million Coloradans live in cities or counties with ambitious near-term energy goals, but there is currently no practical way to reach those goals because they have little choice or control over the energy sources used to produce their electricity. These communities, as well as businesses with energy or sustainability goals, deserve a solution that is timely and cost-effective.

The solution:

Six possible approaches are reviewed that would each provide communities with some form of choice or control over the energy sources used to produce their electricity. Each approach requires either modest or major legislative and regulatory action by state level decision-makers.

The recommended approach:

This paper does not advocate for any particular solution, but rather calls for an inclusive and transparent public process to evaluate all of the options – led by state level decision-makers, informed by a broad variety of stakeholders, and focused on arriving at well-informed conclusions that will be widely accepted.

The role of decision-makers:

Legislators, PUC Commissioners, and the Governor must first recognize that a large number of their constituents want and deserve the ability to reach their energy goals, and that a state-level solution is required. Leadership is needed to initiate a process of evaluating the options to arrive at a well-informed conclusion, and then bring the best solution(s) into existence. Examples of such a process include: a Legislative interim

** *The term "100% renewable energy" in this paper refers to electricity only, not to all uses of energy including transportation and heating, unless otherwise stated.*

committee with expert testimony and public hearings; an "I-docket" or "M-docket" at the PUC with invited speakers and public hearings; and/or a "Governor's select committee on community and corporate energy options," also with public input.

The role of stakeholders:

Groups representing business interests, environmental and consumer advocates, large energy users, utilities, communities with energy goals, and community groups like Colorado Communities for Climate Action (CC4CA) [6] can approach and lobby decision-makers to initiate this process, and then weigh in on it. A grassroots educational component is also needed to raise awareness of the issue in op-eds, public meetings, city councils, town halls, etc. Sustained public support for finding a way that communities and businesses can reach their energy goals is too compelling of a request for decision-makers to ignore. Communities and large corporate energy users are natural allies that could coordinate their efforts for greater impact.

Six ways to address community energy goals:

The six approaches summarized below are described in greater depth in Section 3 of this paper. The intent of the paper is to provide decision-makers and stakeholders with sufficient information and references to comfortably initiate a public process to evaluate the options; the intent is not to provide an exhaustive treatment of each approach.

- **Community Choice Aggregation (CCA):** CCA legislation allows cities, counties or other jurisdictions to combine their purchasing power and choose an alternative electricity supplier on behalf of the residents, businesses, and municipal facilities in the jurisdiction. The electricity is still delivered by the incumbent IOU, which continues to own and operate its transmission and distribution system (the "poles and wires"). Individual customers can opt out of the community's choice if they wish, and purchase their electricity from the IOU (in California) or from the IOU or any approved alternative supplier (in other CCA states).
- **Community Choice in Illinois:** Illinois is a "restructured state" with a fully competitive retail electricity market, unlike Colorado or California. In Illinois, producing and selling electricity is a competitive business, separate from the utility's business of delivering electricity from any competitive supplier to end-use customers. Utilities don't own any electricity generation, so there is little tension between the utility and alternative electricity suppliers because they are not in competition. Communities can simply choose between many electricity suppliers that offer different rates, energy mixes, contract lengths, etc.
- **Community Energy Act (HB18-1428):** This bill, which reflects growing interest in community choice, did not pass the Colorado Senate in 2018; however, it would have allowed communities and IOUs to enter into any collaborative agreement that: 1) is mutually agreed upon; 2) is approved by the PUC; 3) ensures that additional costs to the utility are paid by the community; and 4) does not shift costs to other customers. However, improvements to this first effort are suggested, and should be considered for any similar bill in the future.

- **Municipalization:** Any city served by an IOU can choose to create its own municipal electric utility by acquiring (buying out) and operating the electricity distribution system of the IOU, either at an agreed price or by condemning the assets and paying their fair market value as determined by a court. A municipal utility has the freedom to choose its own electricity supply, energy programs, rate design, and more.
- **Utility-provided 100% renewable energy for everyone:** A variety of studies and other evidence are presented that suggests it is both technically and economically feasible for utilities to accelerate the transition of their entire system to renewable energy, thereby eliminating the need for individual cities to pursue their own solution.
- **Green tariffs:** These are optional programs that allow large commercial and industrial energy users in some monopoly electricity markets to buy renewable electricity from a specific project through the utility. Colorado cities with renewable energy goals could also be characterized as large energy users in a monopoly state looking for cost-effective renewable energy choices, which suggests the idea of designing something like a green tariff that is available to cities or counties.

Options for electric co-ops and municipal electric utilities:

Unlike IOUs, electric distribution co-ops and municipal electric utilities are democratic, self-governing, not-for-profit entities that are mostly not regulated by the PUC. However, most co-ops in Colorado have even less control over their energy sources than cities served by monopoly IOUs, due to the terms of their wholesale electricity contracts. Nonetheless, several co-ops have found ways to pursue their energy goals anyway, which include:

- Buying out their contract and choosing a different wholesale electricity supplier.
- Using a Federal law called PURPA to develop local renewable energy beyond their contractual limit.
- Challenging their wholesale supplier to raise current limits on local electricity generation.

Municipal utilities, which purchase and/or produce their own electricity, have more freedom than co-ops to choose their energy sources, subject mainly to their leadership's support for the community's energy goals.

The time is right to pursue community and corporate electricity options, because:

- A large and growing number of Colorado cities and businesses have ambitious renewable energy goals – this is too large of a constituency to be ignored.
- Cities and businesses want lower cost electricity. Renewable energy and energy storage are reaching cost parity with the operating costs alone of existing fossil fuel plants [7,8,9,10]. The economic argument for more renewable energy has become viable and is gaining strength.

- Corporations want to contract directly for low-cost renewable energy **[11]**. States without corporate choice options may have difficulty attracting and keeping energy intensive businesses **[12]**.
- Legislation to address community energy goals was proposed in 2018 (HB18-1428), but did not pass. If a revised bill is introduced in a future session, the time is right to suggest improvements.
- A study by the Edison Electric Institute (the electric utility trade group) finds that renewable energy is extremely popular with the public, and utility opposition to ambitious renewable energy goals is perceived by the public as "excuses" **[13]**. Consumers are in a better position than ever before to ask for what they want from their utilities, and forward-looking utilities will want to stay ahead of this customer demand.