

AD-HOC SUSTAINABILITY COMMITTEE

Tuesday, August 11, 2020

6:00 p.m.

Due to the COVID-19 pandemic, this meeting will take place virtually via Zoom. Please join the meeting from your computer, table or smartphone by visiting, <https://zoom.us/j/98368810652> You can also participate via phone by dialing, 1-312-626-6799, and use Meeting ID: 983 6881 0652. When asked for your participant ID, just press #.

You may also choose to participate by providing public comment prior to the meeting via email to Village Clerk Lisa Kalata: lkalata@village.cottage-grove.wi.us

1. **Call to Order**
2. **Quorum:** determination of quorum and that agenda was properly posted
3. **Discuss and consider the minutes from July 14, 2020.**
4. **Public Appearances:** public's opportunity to speak about any subject that is not a specific agenda item
 - a. Email from Jared Schumacker from the County Working Group for 350Madison's Community Climate Solutions Team
5. **Usage Updates:**
 - a. Accessing CG Utility Accounts – Nick
 - b. Vehicle Fleet Inventory – J.J.
6. **Determine Sustainability Goal(s) for Cottage Grove**
 - a. Ex) Monona & Fitchburg Clean Energy Resolution (March 2019)
 - b. Ex) Reduce energy usage for city operations by 15% by 2030; Meet 100% of all City operations with renewable energy sources by 2040.
7. **Project Updates:**
 - a. Second Nature Renewable Energy Program – Nick
 - b. Community Electric Vehicle Supply Equipment (EVSE) Grant Program – Jenny & J.J.
 - c. Discuss Website Additions/Facebook Posts - All
8. **Future Projects:**
 - a. New Building Ordinance Mandating Electric Appliances – Nick
 - b. Rain Barrel Program (Ex: <https://www.coawi.org/342/Rain-Barrel-Program>) – Heidi
 - c. Annual Sustainability Update
 - i. Dashboard + Detailed Summary
9. **Adjournment**

Any item on the agenda is subject to final action. Notice: Persons needing special accommodations should call 608-839-4704 at least 24 hours prior to the meeting. It is possible that members of and possibly a quorum of members of other government bodies may be in attendance at the above stated meeting to gather information; no action will be taken by any governmental body at the above stated meeting other than the governmental body specifically referred to above in this notice.

Village of Cottage Grove
DRAFT Minutes Ad-Hoc Sustainability Committee
Tuesday, July 14, 2020

1. **Call to Order:** Nicholas Hess called the meeting to order at 6:00 pm. This was a Zoom meeting.
2. **Quorum:** It was determined that there was a quorum and that agenda was properly posted. Committee members present were Nicholas Hess, John Williams, Heidi Murphy, Catie Malcheski and Jenny Rogers. Staff present were Public Works Director JJ Larson.
3. **Public Appearances:** public's opportunity to speak about any subject that is not a specific agenda item. No members of the public present.
4. **Discuss and consider the minutes from June 9, 2020.**

Motion to approve minutes as presented by Williams, seconded by Murphy. **Motion** carried with a voice vote 5-0-0.
5. **Project Updates & Next Steps**
 - a. Current Sustainability Projects
 - i JJ reported on the preliminary roof condition. The Village will most likely will need a new roof on MSB to maximize the life of roof/solar panel improvements. Committee update will discuss this with the Village Board to provide direction to JJ if he should continue this process for budget proposal time. Looking forward we can explore options to expand solar energy production with either municipality owned solar options, community solar systems that enroll subscribers, or have customer hosted solar land that would be leased out.
 - b. Building Energy Inventory
 - i Catie has been gathering information about checklist of information to gather for the inventory. She has reviewed a checklist on analyzing energy use and both improvements and behavior can both have big impacts on energy use. So some education pieces can include: how can you reduce energy use in your office and home? JJ has created a workbook to gather energy use information. There are some improvements the Village has made over time such as motion detected lights. Catie, Nick, and JJ will work to gather the energy use history so we can measure changes in energy use based on our initiatives.
 - c. Sustainability Website/Facebook Posts
 - i The website and Facebook information presented in the packet was discussed. Nick will send updates to Lisa as needed. Nick provided an overview of the different sections that will be added to the website. This page will have both information about the committee and resources for residents. John noted a few projects currently under way so they can be added to the current projects section. These include LED light bulbs in Village Hall and Municipal Building this year (the Village used local business EPL to do installation). We are also conducting a tree inventory for all Village owned trees to analyze the tree canopy and update the Emerald Ash Borer (EAB) Plan. John would like to add an education section that would highlight information on why the Village is investing in these projects. The goals section will be a work in progress. Committee members can send Nick other items for the website and he will add it to the website update list for next month's meeting.
6. **Future Agenda Items**
 - a. Consider a Sustainability Goal for Cottage Grove – Members should do some research on this before next meeting. Other communities have presented the goals within a sustainability plan while others have a stand along resolution. JJ will bring a basic fleet list and replacement timeline. The utility usage list will also

help to develop the goals. We will use all of this information to begin to draft goals, plans and specific actions to meet the goals.

b. Developing a Comprehensive Sustainability Plan for Cottage Grove – Nick will work on this as we bring together broad goals and specific actions.

c. Canopy Program – Heidi discussed an example out of Monona to provide residents with incentives to diversify and increase the tree canopy. This would build off of the tree inventory. Heidi will take this to Parks, Rec and Forestry also.

d. Free Standing Charging Station – Jenny and JJ started discussing costs, vendors, and placements. Charging stations could be on Village-owned property or placed near local businesses. We discussed options such as Village grant opportunities for local businesses to add stations on their private property. Jenny and JJ will work to find out various costs and options.

e. Prospect of Cottage Grove Joining Alliant Energy's Second Nature Program - Nick will gather additional information for this.

f. Next meeting Tuesday, August 11.

7. Adjournment

Motion to adjourn by Williams at 7:09 pm, seconded by Rogers. **Motion** carried with a voice vote 5-0-0.

**Resolution No. 19-2-2328
Monona Common Council**

**CITY OF MONONA RESOLUTION TO ADDRESS CLIMATE CHANGE THROUGH
100 PERCENT CLEAN¹ ENERGY AND RESILIENCE²**

WHEREAS, the City of Monona is committed to creating a vibrant future for our community by taking responsible and effective action to arrest global warming and become resilient to the devastating risks of climate change on our health and well-being, ecosystems and economy; and

WHEREAS, the Mayor is a 2017 signatory to the Climate Mayors' Pledge to adopt and uphold the Paris Climate Agreement to limit global temperature rise to 1.5 degrees Celsius; and

WHEREAS, the City has been committed to reducing its carbon footprint since resolving in 2010 to generate 25 percent of its energy from renewable sources locally by 2025 as an Energy Independent Community; and

WHEREAS, the City adopted a Comprehensive Plan in 2014 and a Sustainability Plan in 2015 that addresses climate change, is a partner in the Dane County Energy and Climate Commission to move deep decarbonization County-wide, and is developing a comprehensive clean energy action plan in 2019; and

WHEREAS, the City has installed solar energy projects on four of five of its largest City-owned building rooftops; and

WHEREAS, the City is committed to ensuring all residents enjoy the benefits of energy efficiency and renewable energy, electrified transportation, fair utility rates, and employment opportunities of a clean energy economy; and

WHEREAS, youth and future generations will be most severely impacted by climate change, and it is the duty of current leaders to act promptly and resolutely to mitigate climate change for their benefit; and

WHEREAS, the City acknowledges that low-income residents and other vulnerable communities are often most burdened by energy rates and climate impacts; and,

WHEREAS, the economic impacts of severe climate events will become unaffordable to Monona taxpayers as the August 2018 flooding clearly demonstrated, so that mitigating climate change while improving the resilience of City infrastructure is the prudent, fiscally responsible thing to do; and

WHEREAS, climate scientists agree unequivocally that local climate change impacts will continue to include increasingly severe and more frequent droughts, worsening heat waves, excessive flooding, dieback of native tree species, reduced winter sports opportunities, increased prevalence of algal blooms on area lakes and ponds; and loss of suitable trout stream habitat in Wisconsin; and

WHEREAS, community-based, regenerative environmental infrastructure development can benefit the entire City, and positively enhance our ecosystems, provide jobs, add to economic activity, and provide equity benefits; and

WHEREAS, use of distributed solar and other renewable energy sources, paired with energy storage, and backed up by renewable co-generation, is an important strategy to build disaster resilience in the City; and

¹ Clean energy is defined as energy efficiency plus emission-free renewable energy.

² Resiliency is the strengthening of the ability of people and ecosystems to withstand and respond to severe events and ongoing climate changes.

WHEREAS, the City's energy use could be served by existing renewable energy technologies at reasonable cost, and the economic opportunities from a clean energy transition greatly exceed the diminishing economic opportunities from fossil fuels; and

WHEREAS, given the accelerating rate of climate change, as detailed in the Intergovernmental Panel on Climate Change (IPCC) Special Report on Global Warming SR15 and in the Fourth National Climate Assessment, it is urgent that energy consumers, the City, and the utility serving the City must take strong, swift action to reduce carbon emissions, and shift to 100 percent renewable electricity by 2030, which is within practical and economic reach; and

WHEREAS, Monona's utility provider, Madison Gas & Electric, which has pledged to increase its energy mix to at least 30% renewable energy by 2030 with at least an 80% reduction in carbon dioxide emissions by 2050 from 2005 levels, will be a key partner in creating additional cost-effective renewable energy generation, electrified transportation, energy efficiency improvements, and a progressive grid to assist the City in achieving its clean energy and resilience goals; and

WHEREAS, achieving these energy goals will require concerted action from individuals and the community, in urban and rural areas county-wide, from local and state governments, and from businesses and utilities.

NOW, THEREFORE, BE IT RESOLVED, by the Common Council of the City of Monona, Dane County, Wisconsin, the City affirms its ongoing commitment to intensify its action to meet the green house reduction goals of the Paris Climate Agreement, and opposes the rollback of science and climate policy at the federal and state levels; and

BE IT FURTHER RESOLVED, that, given energy efficiency is a key and economical choice for meeting energy needs and reducing our carbon footprint, the City will advance energy efficiency and conservation projects, programs and outreach; and

BE IT FURTHER RESOLVED, that the City will increase green infrastructure such as urban tree canopy, green streets, green roofs, electric vehicle charging stations, and bike and pedestrian infrastructure as an effective strategy to reduce energy consumption and increase public health and well-being along with other climate resiliency strategies;

BE IT FURTHER RESOLVED, the City will meet its 100% renewable energy goals for city operations including buildings, infrastructure and fleet by:

- a) reducing its energy use for city operations by at least 15% by 2030, 40% by 2040 and 50% by 2050; and
- b) meeting 35% of its electric needs for City operations through renewable energy resources by 2025 and 100% by 2030; and
- c) meeting 65% of all City operations energy needs with renewable energy by 2030, 85% by 2035, and 100% by 2040; and

BE IT FURTHER RESOLVED, the City will work to achieve its 100% renewable energy goal community-wide by establishing goals with increasing targets to:

- a) reduce community-wide energy use at least 10% by 2030, and 40% by 2050; and
- b) meet 35% of community-wide electric needs through renewable energy resources by 2025, 50% by 2030, 75% by 2035, and 100% by 2040; and
- c) meet 20% of community-wide energy needs with renewable energy by 2030, 80% by 2040, and 100% by 2050; and

BE IT FURTHER RESOLVED, the City will support energy resources and programs that benefit low-income residents and create more equity in energy use, rates and jobs in the community; and

BE IT FURTHER RESOLVED, the City will prioritize renewable resources and programs during the transition to 100 percent renewable energy; and, when purchasing renewable energy credits (RECs), will prioritize those that generate new renewable energy in Wisconsin; and

BE IT FURTHER RESOLVED, the City will prioritize community-based development of renewable energy in Dane and surrounding counties; and

BE IT FURTHER RESOLVED, the City will collaborate with other governmental and public entities locally and regionally to facilitate all clean energy measures; and

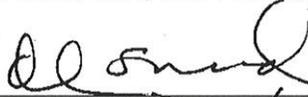
BE IT FURTHER RESOLVED, the City will prioritize local and micro-grid-based renewable energy projects over remote generation and transmission, and provide renewable energy and energy storage at key public facilities to reduce vulnerability to main electric grid failure; and

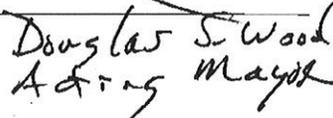
BE IT FURTHER RESOLVED, the City will develop resiliency strategies to deal with anticipated changes and severe climate events associated with climate change; and

BE IT FURTHER RESOLVED, that this resolution requires that the Mayor, City Council, Committees, Commissions and staff actively reduce climate change impacts by amending and developing plans, ordinances, policies and budgets to move Monona toward being a 100% renewable energy and resilient city in order to create a healthier, safer and more prosperous community.

Adopted this 14th day of March 2019.

BY ORDER OF THE CITY COUNCIL
CITY OF MONONA, WISCONSIN


Mary K. O'Connor
Mayor


Douglas S. Wood
Acting Mayor

ATTEST:


Joan Andrusz
City Clerk

Approval Recommended By: Sustainability Committee – 2/13/19

Council Action:

Date Introduced: 2-18-19

Revised: 3-4-19

Date Approved: 3-4-19

Date Disapproved: _____

The Road To Sustainability:

The Village of Cottage Grove's Path To Become a Sustainable Community Annual Update – Jan 2021

Vision Statement: Inspire to develop Cottage Grove as a forward thinking, sustainable and ecologically mindful community for residents to enjoy tomorrow and beyond.

Mission Statement: To educate and enhance the Village of Cottage Grove for a future sustainable community

Goals:

1. To make all Cottage Grove owned/operated property to use carbon-free renewable energy by 2030
2. To make the entirety of the Village of Cottage Grove utilizing carbon-free renewable energy by 2050

Committee Members:

- Nicholas J. Hess, Chair
- Catie Malcheski
- Jenny Rogers
- Heidi Murphy, Village Trustee
- John Williams, Village President

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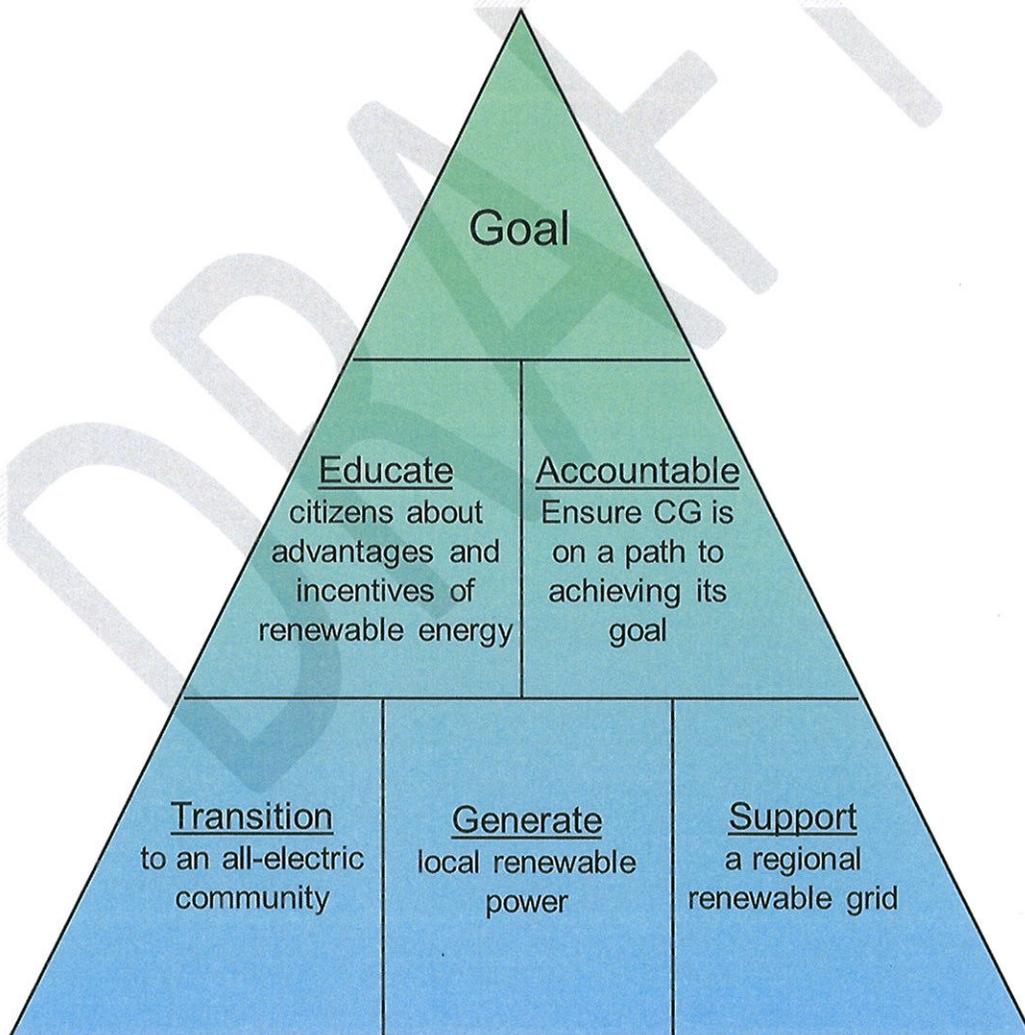
Transition

Generate

Support

Executive Summary

To be written in Dec, 2020.



Goals

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Education

Purpose: To educate the citizens about the advantages and incentives of renewable energy

What We've Done So Far:

1. Created a sustainability website to consolidate and provide relevant information to citizens - <http://www.village.cottage-grove.wi.us/588/Ad-Hoc-Sustainability-Committee>
2. Regularly highlight sustainability opportunities and developments on facebook
3. Allow citizens to showcase their own sustainable moments through the hashtag #sustainableCG

Future Goals:

1. To continually update the website with up-to-date information
2. Highlight important developments on the News-Gazette

Accountability

Purpose: To make Cottage Grove accountable to achieving its goals

What We've Done So Far:

Future Goals:

1. To calculate the average energy usage of each Cottage Grove building
2. To continually update how the energy usage of each building changes over time to ensure we are on track to meet our goals

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Transition

Purpose: To transition Cottage Grove from gas to electric vehicles/appliances

While gas powered vehicles and appliances have been mainstays in the American home for decades, advancements in battery technology and a surge in renewable energy sources by utility companies have driven down the price of electric cars and appliances respectively. In order to succeed at having a fully renewable community, Cottage Grove is committed to transitioning old gas-based cars and appliances to electric ones over the next ?? years.

What We've Done So Far:

Future Goals:

1. Create a list of:
 - a. Electric vehicles on the market
 - b. Electric appliances options
2. Replace every Village owned:
 - a. Gas vehicle with an electric vehicle
 - b. Gas powered appliance with an electric appliance
 - c. Incandescent light bulb with an LED bulb
3. Incentivize local businesses to install charging stations
4. Create an ordinance mandating all new construction contain:
 - a. Only electric appliances
 - b. Only LED light bulbs

Cottage Grove Vehicles

Note: List contains every Cottage Grove owned vehicle, the year they are slated to be replaced and the proposed replacement vehicle

1. *

EVSE Grant Program

This committee, working with the Cottage Grove Chamber of Commerce is developing a grant program to incentivize Level 2 and Turbocharger EVSE installation at local businesses and multi-unit buildings.

Cottage Grove Building Appliances

Note: List contains every Cottage Grove building and if they contain any non-electric appliances or non-LED light bulbs

1. *

Electrical Energy Ordinance

This committee is working on creating an ordinance that will ensure all new construction and significant remodels will only install electric appliances, LED lighting and can pass LEEDS certification.

- [Ordinance Form](#)
- Chapter 130 Building Construction and Fire Prevention: Section 11 Construction Requirements

General Information

1. Electric Vehicles

According to the Electric Power Research Institute, at home charging rates for electric vehicles is equivalent to ~\$1.00/gallon gasoline prices with available turbochargers equivalent to ~\$2.60/gallon of gas. <https://www.alliantenergy.com/InnovativeEnergySolutions/SmartEnergyProducts/ElectricVehicles>

List of Currently Available Electric Vehicles (2020)

- Tesla Model S: 287-373 mi range
- Tesla Model 3: 220-330 mi range
- Tesla Model X: 258-328
- Tesla Model Y: 315
- Hyundai Kona Electric: 258
- Hyundai Ioniq Electric: 170
- Nissan Leaf and Leaf Plus: 150 and 226
- Chevrolet Bolt EV: 259
- Audi e-tron: 204
- Jaguar I-Pace: 234

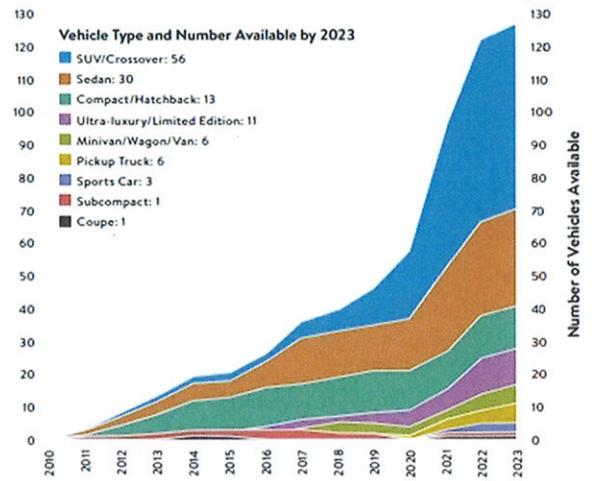


Figure 1. The number and variety of EV models continues to grow. By the end of 2020, about 63 different models are expected to be available in the U.S. By 2023, approximately 127 models are projected.

Electric Vehicle Supply Equipment (EVSE) or Charging Stations

- **Level 1** – provides charging through a 120 volt AC plug and adds 2-5 miles of range per hour of charging. Does not require any special equipment besides an outlet and comes standard with most electric vehicles purchases
- **Level 2** – provides charging through a 240 volt AC plug and adds 10-20 miles of range per hour of charging. Requires installation of special equipment and a dedicated 20-100 amp circuit. Installation costs range from \$500-2,000 dollars. Alliant Energy will install a Level 2 EVSE in your house and offer a \$500 rebate.

<https://www.alliantenergy.com/InnovativeEnergySolutions/SmartEnergyProducts/ElectricVehicles/EVHomeChargersandRebates>

- **DC Fast Charging (Turbocharger)** – provides charging through a 480 volt AC input and adds 180-240 miles of range per hour. Installation costs range from \$20,000 – 50,000 with Alliant Energy offering a \$1,500 rebate per installation.
<https://www.alliantenergy.com/WaysToSave/Rebates/RebateLocatorTool/ElectricVehicleWorkplaceChargingStation>

EVSE Chargers: [Tesla](#), [ClipperCreek](#), [ChargePoint](#)

Electric Appliances

List of Commercial Company's Offering Electric Appliances

1. Wohlers: <https://www.wohlersheating.com/webapp/p/549/water-heaters>
2. Landmark Heating and Cooling: <https://www.hotwater.com/where-to-buy/wisconsin/cottage-grove/landmark-heating-and-cooling/>

Contacts

- Jerry L. Batson P.E. – Lead Distribution Engineer – Alliant Energy – jerrybatson@alliantenergy.com
- Cottage Grove Chamber of Commerce – cgchamber@cottagegrovechamber.com

Generate

Purpose: To generate local renewable power.

Specific Goals:

1. To install solar panels on every Cottage Grove owned building that has the adequate support structure and access to sunlight to reduce that buildings energy usage on the grid.
2. To bring a community solar project to Cottage Grove, allowing mid-sized renewable energy to be generated locally.

Solar Panel Companies

Note: List of local companies that will install solar panels on private, business or government buildings

- Full Spectrum Solar (Residential, Commercial & Government): <https://fullspectrumsolar.com/>
- Midwest Solar Power (Residential, Commercial & Government): <https://www.mwsolarpower.com/>
- SunVest Solar (Commercial & Government): <https://www.sunvest.com/>
- SunPeak (Commercial & Government): <https://www.sunpeakpower.com/>

Solar Panel Energy Production

Note: List of Cottage Grove owned buildings, when solar panels are slated to be installed, the number of solar panels installed, the % energy reduction and the years until the solar panels have paid for themselves

- ??

Community Solar Projects

Alliant Energy is starting to support several community solar projects that we will investigate. Possible locations include:

- *Near Glacial Drumlin and the new Elementary School??*
- ??

Support

Purpose: To support a regional renewable grid.

Specific Goals:

1. To join Alliant Energy's Second Nature program to ensure our electrical needs support renewable energy projects in Wisconsin and Iowa

Second Nature Program

Alliant Energy's Second Nature Program is a green pricing program that allows consumers to "buy-in" at either 25%, 50% or 100%, increasing their monthly energy costs \$0.01/kWh when choosing a 100% buy-in. The increased cost allows Alliant Energy to purchase additional renewable energy from a collective of renewable energy sources located in southern Wisconsin and Iowa.

Example) The average 3-bedroom house in Cottage Grove uses ~500kWh/month, with a 100% buy-in increasing the monthly bill by only \$5 a month.

<https://www.alliantenergy.com/InnovativeEnergySolutions/SustainableEnergyChoices/SecondNature>

References

Alliant Energy: <https://www.alliantenergy.com/>

Alliant Energy Renewable Energy Hotline: 1-800-972-5325

U.S. Department of Energy Plug-In Electric Vehicle Handbook: <https://afdc.energy.gov/files/pdfs/51227.pdf>

Alliant Energy Second Nature Program:

<https://www.alliantenergy.com/InnovativeEnergySolutions/SustainableEnergyChoices/SecondNature>

Guide To LEED Certification: <https://www.usgbc.org/cert-guide>

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