AGENDA
LAKEWOOD CITY COUNCIL
STUDY SESSION
CITY OF LAKEWOOD, COLORADO
VIRTUAL MEETING
MAY 17, 2021
7:00 P.M.

To watch the Council meeting live, please use either one of the following links:

City of Lakewood Website: https://www.Lakewood.org/CouncilVideos
or
Lakewood Speaks: https://lakewoodspeaks.org/

Phone Number for Public Input: 1-346-248-7799
Webinar ID: 972 9436 2602
(press # after entering the webinar id then press # once more to join the meeting)
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ITEM 1 – CALL TO ORDER

ITEM 2 – ROLL CALL

ITEM 3 – PRESENTATION – JEFFERSON COUNTY SLASH FACILITY

PUBLIC INPUT

ITEM 4 – PRESENTATION – QUAIL STREET RECYCLING CENTER UPDATE

PUBLIC INPUT

ITEM 5 – PRESENTATION – SUSTAINABILITY DIVISION REGARDING PLANNING

PUBLIC INPUT

ITEM 6 – REPORTS

ITEM 7 – ADJOURNMENT

STAFF MEMO

DATE OF STUDY SESSION: MAY 17, 2021 / AGENDA ITEM NO. 3

To: Mayor and City Council

From: Kit Newland, Director of Community Resources, 303-987-7822

Subject: **Jefferson County Slash Facility**

SUMMARY STATEMENT: The Executive Director of Jefferson County Open Space, Tom Hoby, will provide a presentation regarding the County's efforts to build a slash facility to be operated by the Rooney Road Recycling Center Authority. Jay Hutchison, Director of Public Works, will provide background information about the Rooney Road Recycling Center Authority. No action is needed by City Council at this time.

BACKGROUND INFORMATION: From January 2008 to November 2012, a slash drop site operated through a contract with A-1 Organics at the Rooney Road Recycling Center on land owned by Jefferson County Open Space. The slash site was operated by the Rooney Road Recycling Center Authority, a consortium of eight municipalities and the County.

The slash collection was popular and the service was well received by the community. In the short time the facility was in operation, over 340,000 cubic yards of material was collected by more than 91,000 customer visits. The facility also served community-wide needs following storm events that downed trees and limbs.

As the operation continued to grow, the County became concerned about the visual impact of wood and debris adversely affecting the view scape to Jefferson County's Gateway to the Rockies. In addition, the slash operation was inconsistent with the then-existing Open Space designation on the land. October 31, 2012, was the last day of the Rooney Road Center Slash operation as the short-term contract was allowed to expire. Since that time, Lakewood's City Council has advocated for a replacement facility and staff have been in pursuit of an avenue by which to meet this goal.

FINANCIAL IMPACTS: The City will be expected to make some financial contributions as will all Jefferson County participating agencies. Specifics are not available at this time.

STAFF RECOMMENDATIONS: A Slash facility that can serve the entire citizenry of Jefferson County would be a great asset for the entire community and would satisfy one of Council's priorties. Staff recommends Council's support of the County's and Rooney Road Recycling Center Authority's efforts to provide a slash facility.

ALTERNATIVES: No alternatives.

PUBLIC OUTREACH: This item was promoted through the regular communication channels for an item coming before City Council.

NEXT STEPS: As more information is made available, Council will be informed.

ATTACHMENTS: None

REVIEWED BY: Kathleen E. Hodgson, City Manager
Benjamin B. Goldstein, Deputy City Manager
Alison McKenney Brown, City Attorney

STAFF MEMO

DATE OF STUDY SESSION: MAY 17, 2021 / AGENDA ITEM NO. 4

To: Mayor and City Council

From: Jay N. Hutchison, Director of Public Works, 303-987-7901

Subject: Informational Update – Quail Recycling Center

SUMMARY STATEMENT: The City of Lakewood has operated a public recycling facility at 1068 Quail Street since 1988. The physical and operational nature of the facility has evolved over the years to improve utilization and effectiveness while managing costs. City Council and the community will receive an update about the facility's operation. No action is requested from the City Council.

BACKGROUND INFORMATION: During the latter portion of 2019 and early 2020, modifications to the operation of the Quail Recycling Center were being evaluated. The goals of those modifications were to improve operational effectiveness and establish financial sustainability of the Recycling Center. In large part, the issues that had been developing were as follows:

1. The need for on-site attendant support for users and operation of the Recycling Center had grown to exceed the single attendant approach that was in use.
2. Peak demand times were exceeding the facility's capacity causing delays for customers and some closures due to full roll-off containers.
3. The financial bottom-line of the Recycling Center had been deteriorating as rebates for recyclable material had declined and operational costs increased.

With the advent of COVID-19 in March 2020, the immediate need to make adjustments for new reasons arose. Those adjustments included temporary closure of the Recycling Center followed by re-opening with appointments being required to manage utilization of the Recycling Center to ensure appropriate social distancing. Prior to re-opening during the COVID-19 era, no appointment was necessary to drop-off recyclables accepted by the Recycling Center. Utilization of the Recycling Center has been less since the re-opening.

The informational update during the City Council's study session will include specific updates regarding the pre-COVID and subsequent circumstances including recent operational modifications. The current financial status will also be described.

No City Council action is requested.

BUDGETARY IMPACTS: This informational update has no budgetary impacts.

STAFF RECOMMENDATIONS: City staff has no recommendations regarding this informational update.

ALTERNATIVES: The informational update does not require any City Council action, so no alternatives have been identified.

PUBLIC OUTREACH: This item was promoted through the regular communication channels for items that come before the City Council.

NEXT STEPS: None.

ATTACHMENTS: None

REVIEWED BY: Kathleen E. Hodgson, City Manager
Benjamin B. Goldstein, Deputy City Manager
Alison McKenney Brown, City Attorney

STAFF MEMO

DATE OF STUDY SESSION: MAY 17, 2021 / AGENDA ITEM: 5

To: Mayor and City Council

From: Travis Parker, Director of Planning, 303-987-7908

Subject: **SUSTAINABILITY UPDATES**

SUMMARY STATEMENT

City Council identified sustainability as a priority for 2021 and requested regular updates from staff on progress towards implementation of the City of Lakewood Sustainability Plan. The Sustainability Plan Annual Report, which tracks the City's progress towards implementation of the plan, will be published later this year once all relevant data sets are available.

At the May 17, 2021 Study Session, staff will provide updates on projects and programs designed to enhance resource efficiency in Lakewood buildings, as well as accelerate the transition to renewable energy while ensuring affordable energy for Lakewood. Specifically, staff will cover the following:

1. Highlights of existing projects and programs advancing energy efficiency, water conservation and the transition to renewable and affordable energy.
2. Two approaches for development of on-site renewable energy systems for municipal facilities:
    a. Rooftop, parking canopy, or ground-mounted installations on a site-by-site basis
    b. Combined site community solar garden (Solar electricity generated from multiple municipal facilities combined into one project)
3. Residential Solar Accelerator Program designed to significantly increase the number of solar energy systems installed in Lakewood and to advance equitable access to renewable energy.
4. Proposed approach to implementing the Lakewood Advisory Committee's (LAC's) proposal for establishing a Renewable Energy Mitigation Program.

BACKGROUND INFORMATION

1. **Highlights from Existing Programs advancing energy efficiency, water conservation and the transition to renewable and affordable energy.**

    Energy Efficiency and Water Conservation in Municipal Facilities: Staff priorities continue to focus on increasing resource efficiency at our largest buildings by closely monitoring energy and water usage and working with the Facilities department to identify additional savings opportunities.

    Recent improvements in resource efficiency at our community facilities (Public Safety, Civic Centers, and Recreation Centers) can be largely attributed to the city's investment in its Energy Performance Contract with McKinstry. In 2019, McKinstry completed several facility improvement measures at community facilities with guaranteed utility cost savings. The first year of Measurement and Verification yielded the following results to the city:

- $149,973 saved in annual utility costs
- 1.6 million kilowatt hours of electricity and 68,000 therms of natural gas avoided
- 2.6 million pounds of carbon emissions avoided

Energy Efficiency and Water Conservation in the Community: At a community-wide scale, existing partnerships and resources are being utilized to increase energy efficiency and reduce water usage at no additional capital cost to the city, including the following:

- Mile High Youth Corp continues to perform water and energy saving retrofits at several of Lakewood's low-income households. The average household served saves $250 in annual energy and water bills.
- The City has enrolled in Xcel's Partners in Energy program, which provides technical consulting and funding to increase both residential and commercial participation in resource efficiency and rebate opportunities.
- Staff is partnering with the Alameda Corridor Business Improvement District (ACBID) to enroll businesses in a free energy audit program to identify energy and cost savings opportunities, which will be subsidized by ACBID.
- Several of the Sustainable Neighborhoods will engage in community projects related to household energy and water efficiency.

Sustainability staff is actively seeking federal, state, and private funding opportunities to accelerate progress towards our energy efficiency and water conservation goals.

Renewable Energy in Lakewood: Significant progress has been made in the transition to renewable electricity as a result of increasing access and affordability of renewable technology and the increase in programs and investments integrating renewable electricity generation into the region's electricity grid. However, access to renewable energy for Lakewood's low-income households remains a challenge. Staff continues to utilize existing resources and partners to accelerate the use of renewable energy for the city's residents, businesses, and municipal operations.

- The City receives its electricity from Xcel Energy. In 2019, 22% of the electricity grid mix servicing Lakewood was generated by renewable energy and Xcel Energy estimates that this will increase to 52% by 2025.
- Even though the city is on track to achieve more than 45% of electricity from renewable sources (a 2025 target in the Sustainability Plan), it is not on track to achieve its 45% overall energy goal due to the non-renewable heating and transportation fuels used. If 100% of the city's electricity needs were generated from renewable sources, this would only be 35% of its overall energy use.
- Transitioning natural gas and transportation fueling energy to renewable sources is a more complicated endeavor due to the cost and availability of both natural gas and vehicle gasoline and diesel; additional research is underway to address the challenge of ensuring an affordable transition to renewable energy for these sectors. Converting natural gas heating and vehicle fuels to electric energy (beneficial electrification) is one important way to address this challenge.
- In 2019, 39% of municipal electricity was generated by renewable sources. This includes solar power generated from the city-owned 274 kilowatt (kW) photovoltaic (PV) panels located at a local Jefferson County community solar garden (an off-site solar array that allows customers to own or subscribe to a share of the solar energy produced and receive a

monthly electricity bill credit in return), as well as a 1,015 kW subscription to Xcel Energy's Renewable*Connect program, an off-site solar farm in eastern Colorado.
- In 2019, 24% of residential electricity was generated by renewable sources, including electricity generated from on-site solar panels, as well as off-site renewable energy subscriptions.

2. Potential approaches for development of on-site renewable energy systems for municipal facilities

Due to the ongoing interest and stated priorities of City Council, staff will present two options for development of on-site renewable energy for municipal facilities. Both models have the potential to advance Lakewood's goals for increasing renewable energy and reducing greenhouse gas emissions, while supporting City Council's interest in installing renewable energy systems on city facilities.

The city's current renewable energy portfolio is generated from off-site renewable electricity. On-site solar electricity is generally produced using PV panels mounted on rooftops, ground, or parking canopies:

- Rooftop PV installations offer the benefits of offsetting facility electricity bills, reducing carbon emissions at a larger scale, and moderate cost and payback periods.
- Parking canopy PV installations offer the benefits of community visibility, vehicle protection from hail, and the potential for co-location of electric vehicle charging, though at a higher cost compared to the rooftop option.
- Ground mounted PV systems provide the highest solar power generation and lowest payback periods due to overall size of the system.

Option 1: Solar installation on a site-by-site basis

In 2019, as part of the EPC, McKinstry performed an initial analysis for rooftop PV panels at Carmody Recreation Center, Green Mountain Recreation Center, and the Public Safety Center. Staff has been building off this initial analysis by exploring other potential locations and system types at city owned and maintained facilities, working with Community Resources to coordinate initial planning and site analysis.

A preliminary analysis of solar potential at select municipal facilities and properties was performed to study the feasibility for installation of PV on rooftops, parking canopies, and ground mounted systems at the city's community facilities. Staff is presently evaluating several factors, including construction and operating costs, financing options, land use restrictions, structural and interconnection assessments, and potential grant funding.

Option 2: Multiple sites combined into one project (community solar garden) approach

Traditionally, the electricity generated from on-site PV is assigned to a local electricity meter at the same physical location. For example, solar electricity generated at the Public Safety Center could only be applied to the electricity meter at that building and not one of the city's recreation centers. However, staff is exploring an innovative approach of hosting its own disaggregated community solar garden that could incorporate a blend of multiple types of installations (rooftop, ground mounted, and canopy) from sites throughout the city.

The benefits of this approach include:

- Significantly increasing the amount of renewable energy generated for both municipal operations and the Lakewood community
- Making locally generated renewable energy available to Lakewood residents that cannot install solar on their roof
- Increasing affordable access to renewable energy for low-income households and non-profit entities
- Partnering with local organizations to provide local job training and employment opportunities

Staff is studying and evaluating a range of potential benefits and constraints associated with this approach, including the greenhouse gas reduction impact, economic benefit of utility scale installations, land use and charter restrictions, build cost and financing options, administrative responsibilities, and potential risks to the city.

3. Residential Solar Accelerator Program

Staff is evaluating a project that would support the transition to affordable renewable energy through a public/private partnership by providing energy efficiency improvements and solar PV systems on Lakewood homes at no up-front cost to nearly all homeowners who want to participate, as well as no up-front cost to the City.

In a typical year, around 200 households install rooftop solar in Lakewood. This program, referred to as the Residential Solar Accelerator, has the potential to significantly increase the number of solar energy systems installed in Lakewood and to advance equity in renewable energy access by making rooftop solar accessible to homeowners that currently lack the upfront capital to invest in a home solar system. The program is a new and innovative model within the solar industry. Sustainability staff has been working with Finance and the City Attorney to evaluate the feasibility of this program.

Key Program Elements:

1. Homeowners apply to receive a combination of energy efficiency improvements and a solar PV system installed on their home at no upfront cost. The system is sized to reduce each home's annual electricity bill by 90-100%.
2. The City and the program developer enter into a 20-year power purchase agreement, with the program developer covering the costs of the efficiency improvements, solar installations, and long-term maintenance.
3. The financial savings earned by each home is split between the homeowner, the City, and the program developer. The homeowner retains approximately 25% of this savings. Approximately 15% of the savings is retained by the City to cover administrative costs and an escrow fund would be established to minimize risk to the city. The remainder of the savings would go to the investor/program developer.
4. The administrative tasks, including billing and payment collections, household sign ups, and maintenance requests, is the responsibility of the program developer.
5. Marketing for the program is led by the program developer with support from city staff.

This program has the potential to significantly increase the number of households utilizing solar power while making renewable energy available to property owners who do not have the financial resources to pay full upfront costs for solar installation on their homes.

Next steps for staff considerations include evaluating the minimum number of household participation needed to make the program financially viable and environmentally impactful, gauging community interest for this program model, further identifying short and long-term risks to the City, determining staff resources required to administer the program, and ensuring homeowner consumer protections are in place.

4. Proposed approach to implementing LAC's proposal for establishing a Renewable Energy Mitigation Program.

In February 2021 the Lakewood Advisory Commission (LAC) presented recommendations to City Council for a Renewable Energy Mitigation Program with the goal of generating revenue through penalties or fees-in-lieu of compliance with sustainability-related building codes or development standards. Staff agrees that a revenue source dedicated to supporting energy efficiency, renewable energy and community-wide greenhouse gas emissions is needed but is concerned with the recommended approach.

Staff is recommending that rather than establishing a system that intentionally promotes difficult-to-achieve building or development codes in order to entice large projects to pay fees-in-lieu of compliance, that the city establishes a carefully designed sustainability fee on developments based on the Social Cost of Carbon (estimated dollar price to society for every new metric ton of carbon dioxide emitted), as established by the United States Environmental Protection Agency (EPA) and recognized by the State of Colorado legislature through Senate Bill 19-236 in 2019. Currently, the Social Cost of Carbon is no less than $46/ton.

Similar to common 1% for Art ordinances, park land, or school dedication fees, a sustainability fee would be established for select types and sizes of developments (with consideration to impacts on equity, housing cost, economic development, etc.) and would be based on the projected increase in Greenhouse Gas (GHG) emissions attributed to each project. Revenue from the fee would then be used to invest in capital facilities that result in a measurable reduction in Lakewood's GHG emissions.

There are numerous benefits to this type of approach to achieve the goals of the LAC's recommendation. They include:

- A direct connection between development and climate impacts.
- Providing an incentive to design and build projects that minimize GHG emissions in order to minimize the project fee. This may include increased resource efficiency, on-site renewable energy generation, mitigating gas-powered transportation, or increasing waste diversion infrastructure.
- A fairer alternative than a system that allows developers to pay their way out of code requirements.
- Creating a rational nexus between impact from new development and programs that mitigate emissions.

This is in the early conceptual phase and additional research is needed to fully develop a strategic proposal. Staff has had preliminary discussion with the City Attorney's office, but significant additional research, modeling, and cross-departmental input is needed. If supported, staff would proceed with research and form a community task force to develop a formal proposal to bring to City Council for consideration.

BUDGETARY IMPACTS: To be determined through future assessments of programs identified for continued research and program design.

STAFF RECOMMENDATIONS: Instruct staff to continue research and program design in order to bring forward formal proposal to City Council on the following:

1. Both options (solar installation on a site-by-site basis and disaggregated community solar garden approach) for developing renewable energy systems on municipal properties.
2. Residential Solar Accelerator Program
3. Sustainability Fee on development

ALTERNATIVES: Instruct staff to continue research and program design for fewer items or not at all.

PUBLIC OUTREACH: The next steps for each of these projects will include an appropriate public outreach process. This may include a combination of project working groups, community surveys, online engagement, in-person outreach, direct marketing, and educational campaigns.

REVIEWED BY: Kathleen E. Hodgson, City Manager
Benjamin B. Goldstein, Deputy City Manager
Alison McKenney Brown, City Attorney