

Proposed Sale of Environmental Attributes

Leveraging King County's Production and Use of
Renewable Energy to Meet Climate Goals



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Presentation Overview

- **2 pieces of legislation before TrEE**
- **How did we get here?**
 - Council Direction on renewable energy
 - Long track record of producing and using renewable energy
- **What is a RIN?**
- **Wastewater and Transit Legislation Summaries**
- **Next Steps and Timeline**



Wastewater: Proposed Ordinance 2016-0339

- Authorizes agreement for the sale of biomethane gas produced at South Plant **and** related *environmental attributes*



Transit: Proposed Ordinance 2016-0349

- Authorizes agreement for the sale of *environmental attributes* created when King County buses are powered by qualified renewable electricity



Council-Adopted Goals & Policies

2015 Strategic Climate Action Plan (SCAP)

- Overall goal to reduce GHG emissions 80% by 2050
- Transit priority action to consider selling environmental attributes
- Building and Facilities Energy target for renewable energy production

Ordinance 17971

- Directs Metro Transit to create carbon offset program
- Requires the Wastewater Treatment Division to be carbon neutral by 2025

Ordinance 18106

- Directs Transit to consider monetizing “Renewable Identification Numbers”

Comprehensive Plan

- E-202: Maximize the creation of resources from waste products from county operations . . . in a manner that reduces greenhouse gas emissions and produces renewable energy

Strategic Plan

- Environmental Sustainability and Financial Stewardship



King County Renewable Energy Leadership

Producing Renewable Energy

- Wastewater and Landfill Gas
- Solar
- *We now produce energy equivalent to what we use to run county buildings and facilities*

Consuming Renewable Energy

- Wastewater Treatment Plant operations
- Transportation biofuels
- Green power purchases



Current King County Monetization of Environmental Attributes

Cedar Hills Landfill

- Environmental Attribute contract with Puget Sound Energy

West Point Treatment Plant

- Renewable electricity and related Environmental Attributes are sold to Seattle City Light



Public Benefits of Proposed Legislation

- Reduces Greenhouse Gas Emissions
- Supports Use of Renewable Transportation Fuels
- Creates Revenue to Invest in climate action
- Builds on county investments in renewable energy production and alternative fuel vehicles



What is a RIN?

- RIN stands for “Renewable Identification Number”
- Comes from the EPA Renewable Fuel Standard
- Goal is to increase use of renewable fuels in transportation over time
- Each RIN is tied to a specific quantity of qualified renewable energy used in transportation



What is a RIN? (continued)

- RINs must be purchased by “Obligated Parties” like oil producers, refiners and importers
- Tradable commodity; price fluctuates
- EPA sets renewable fuel volume requirements for each year
- Proposed Wastewater and Transit transactions take advantage of “Cellulosic” RIN category, which is growing



The RIN Transaction: 3 Parties

1. Biofuel *Producer*
2. Biofuel *Consumer* (Transportation Use)
3. RIN *Purchaser* (Obligated Party)



Wastewater Ordinance

- **Authorize agreement with IGI Resources for sale of biogas and RINs**
- **Reinvest revenue in actions that further SCAP goals**
 - **Examples: energy efficiency retrofits, solar**



Wastewater: How it works

- **South Treatment Plant produces renewable biomethane**
- **We sell biomethane and environmental attribute (RINs)**
- **We get gas commodity value, plus 70% of RIN value**
- **Three year agreement with two, one-year optional extensions**
- **Estimated \$4 million of additional biennial revenue**



South Treatment Plant
biomethane production

+



Natural gas vehicles consume
an equal volumes of gas as the
treatment plant produces

=



Transit Ordinance

- **Authorize agreement with Element Markets for the monetization of Environmental Attributes known as RINs**
- **Reinvest revenue in actions that further SCAP Goals**
 - **Example: Purchase biodiesel for Transit Fleet**



Transit: How it works

- **Electric trolley and electric bus fleet consume electricity**
- **Transaction pairs renewable electricity produced at landfill-gas-to-energy plant with Transit's use to create RINs**
- **Agreement for 70%+ of RIN value**
- **Three year agreement with two, optional one-year extensions**
- **Estimated \$1.6 million of new biennial revenue**



**Electricity produced
with landfill gas**

+



**Electric buses consume an
equal volume of electricity as
the landfill produces**

=



Common Approach to Contracting and Legislation

- **For both transactions, pursued contract approach that minimizes risk and optimizes revenue**
 - Issued Request for Proposals for both transactions
 - WTD and Transit used outside Counsel experienced with similar transactions.
 - King County PAO review
 - Further revisions identified by Council Central Staff
- **Both authorizing ordinances focus investments of revenue on actions that further SCAP goals**



Next Steps

- **Establish RIN relationship (*DONE*)**
- **If authorized by Council, execute contract documents**
- **Submit transaction to EPA for review and approval**
 - Estimated 3-6 month process for approval
 - Wastewater biomethane transaction type has track record with EPA; may go faster than Transit pathway
- **Environmental Attribute revenue begins accruing after EPA approval**
 - If approved, King County stands to gain more than \$200,000 per month in new revenue

