Proposed Sale of Environmental Attributes

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



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 <u>and</u> 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

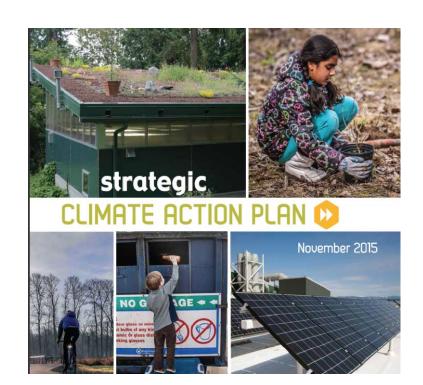






Public Benefits of Proposed Legislation

- 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)

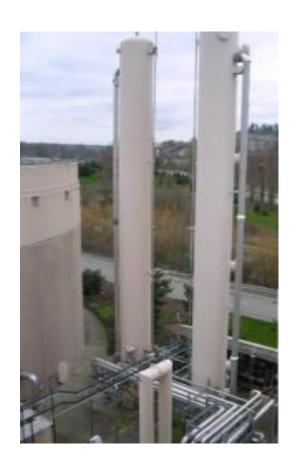
- RINs must be purchased by "Obligated Parties" like oil producers, refiners and importers
- Tradable commodity; price fluctuates
- EPA sets renewable fuel volume requirements for each year
- Proposed Wastewater and Transit transactions take advantage of "Cellulosic" RIN category, which is growing

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 <u>and</u> 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 <u>and</u> 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 <u>consume</u> an equal volumes of gas as the treatment plant produces



King County

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 landfillgas-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 <u>produced</u> with landfill gas



Electric buses <u>consume</u> 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 <u>Request for Proposals</u> 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 <u>after</u>
 EPA approval
 - ➤ If approved, King County stands to gain more than \$200,000 per month in new revenue

