



**City of Denton**  
**MINUTES**  
**COMMITTEE ON THE ENVIRONMENT**

City Hall  
 215 E. McKinney Street  
 Denton, Texas  
 www.cityofdenton.com

**Monday, October 7, 2019**

**1:30pm**

**City Council Work Session Room**

After determining that a quorum of the Committee on the Environment of the Denton City Council was present, the Committee on the Environment thereafter convened into an Open Meeting on Monday, September 9, 2019 at 1:47 p.m. in the Council Work Session Room at City Hall, 215 E. McKinney Street, Denton, Texas

**Council Members:** Chair Council Member Keely Briggs, and Council Member Paul Meltzer

**Absent:** Council Member Jesse Davis

**Also Attending:** Mario Canizares, ACM; Kenneth Banks, General Manager Utilities; Katherine Barnett, Sustainability and Customer Initiatives Manager; Deborah Viera, Assistant Dir of Env Services; David Hunter, Watershed Protect & Pretreat Mng; Vanessa Ellison, Recycling Education Coord; Sarah Luxton, Sustainability Coordinator; James Douglas, Conservation Program Coord; Christi Upton, Environmental Compliance Coord; Kim Mankin, Utility Administration Manager

**REGULAR MEETING**

**A. COE19-036** - Consider approval of the minutes of September 9, 2019.

Approved as circulated.

**B. COE19-027** – Receive a report and hold discussion regarding Zero Energy and Zero Energy Ready Homes.

Katherine Barnett gave the PowerPoint presentation. She also introduced Jimmy Tanghongs that would give part of the presentation.

Background included:

Following a City Council request and subsequent staff report, it was requested that staff bring forward a presentation about Zero Energy Homes to the Council Committee on the Environment.

A zero energy home is not just a “green home” or a home with solar panels. A zero energy home combines advanced design and superior building systems with energy efficiency and on-site solar panels to produce a better home. Zero energy homes are ultra-comfortable, healthy, quiet, sustainable homes that are affordable to live in.

Zero Energy Homes

- Average additional cost 10%.
- Can be offset by rebates, tax incentives and by building design choices.
- Time to recover cost varies most estimates start at 10 years and up.

Zero Energy Ready Homes

The U.S. Department of Energy (DOE) defines a zero energy ready home as “a high performance home which is so energy efficient, that a renewable energy system can offset all or most of its annual energy

consumption.” DOE zero energy ready homes are designed to meet high performance standards so that they live better, work better and last longer than code built homes. The U.S. Department of Energy (DOE) maintains that a Zero Energy Ready Certified Home is the home of the future that is available today.

Typical components of Zero and Zero Energy Ready homes.

- 2x6 or 2x8 wall framing
- Roof framing suitable for PV systems
- Extra insulation
- Onsite renewable energy
- Smart home technology
- High efficiency appliances and HVAC

Committee Chair Briggs asked if our rebates cover the HVAC. Barnett answered they cover anything 16 Seer and above.

Barnett showed a couple of resources for this.

Committee Member Meltzer asked if we are seeing this because of a new policy. Barnett answered it was a request. There was some discussion.

Jimmy Tanghongs with New Modern Homes talked about this item next. He gave his background which included building net zero homes as well as sustainable homes. He then described the items for the sustainable homes including the tile, brick and stone.

These techniques for sustainable homes can be applied to all residential and commercial buildings. He showed designs of the different homes.

TPO roofs are better and are used on commercial buildings. Meltzer asked what is TPO. Tanghongs answered it is a membrane that includes plastic and rubber.

Briggs asked what is the life of TPO roofs, Tanghongs answered it is similar to composition.

-LED lighting has 45-year life and are used in these homes.

-Medal HVAC Ducting us used instead of flex ducting.

-Foam insulation in the walls and ceilings, and outulation is on the outside of the home as well. Tanghongs showed data for his HVAC to show how well they are insulated.

-Many Solar panels on the homes

Briggs asked if Tanghongs is building individual homes or developments. He answered both. He would like this group to go on a field trip to the model home. He has a development in Frisco. There was discussion on why he choice Frisco and Dallas to build.

Meltzer asked if he has looked at the Denton code to see if there is any obstacles on building homes like this. Tanghongs answered he has not.

There was some further discussion.

C. **COE19-035** – Receive a report and hold a discussion regarding the current status and future improvement of DME’s electric vehicle (EV) charging infrastructure.

Chase Wittman with Denton Energy Services gave the presentation.

DME Electric Vehicle Pilot - this vehicle will be used in the Electric Metering Department.

Charger program background –

In 2013, 12 Blink electric vehicle charging stations were installed in public areas around Denton. There is an on-going network fee of \$18 per month per charger which totals to \$2,592 per year. Revenues from the chargers’ use are remitted to DME following 8.25 percent sales tax and 8 percent transaction fee diverted to Blink.

Charger program background – revenue was shown on a pie chart with additional information from Wittman.

Analysis of charger performance –

- Charger use and revenue is rising since installation
- Reliability issues and downtime could be impacting use
- Charger use has grown comparably to EV adoption

Wittman then explained options going forward.

1. Deactivate and remove chargers at a cost of \$15,600 and the City would no longer have EV charging services.
2. Repair existing Blink Chargers which would be about \$5,500.
3. Blink Upgrades installation estimated at \$1,300 each
4. Replace with modern charging platform which is about \$40,770.

Briggs added they are very slow in charging.

A summary of the options was shown on a table.

Meltzer asked how would option 4 be paid. Wittman answered there is money in the budget. There was more discussion.

Meltzer stated he is unsure what the goal of the program is. Wittman answered there isn’t a goal as the program stands currently. Many municipalities offer charging stations to be public and as Denton grows it may be expected. Briggs stated adding more electric infrastructure was a goal.

Canizares stated there is a lack of data currently. Modernizing the charging stations would also add to our sustainability needs and give citizens opens for charging their vehicles.

Briggs is open to the new data platform but had several questions.

Briggs asked if we know how many electric cars are in the City of Denton and Denton County? Barnett answered 140 in the City of Denton and 1,471 in Denton County.

Meltzer stated Option 3 would be good for a short-term goal as staff looks for long term solutions.

Staff recommends

-A modern charging platform allows establishment of City controlled charging network with flexibility regarding rates, programs, and future direction.

- Improved software and networking allows DME to gather more data and improve confidence in long term EV adoption and charging trends.
- Given cost and considerations, replacing existing chargers at current locations will provide the best opportunity to gather data for future program planning, as well as offer flexibility regarding program structure as it develops.
- Use this data to inform decisions regarding expansion of public charging network.

Briggs is in favor of Option 4.

No recommendation from COE, they would like to see what Council has to say.

**D. COE19-037** – Receive an update and hold a discussion regarding Greenhouse Gas Emission Reduction Targeting.

James Douglas gave this update presentation.

Background

- 2018 GHG inventory recap
- Emission reduction target options
- Request for additional information and forecasting
- Forecasts and additional strategies

2018 GHG Inventory recap was explained.

Community emission reduction targets were shown with four options.

CO<sub>2</sub>e Projections were based on 2006 values projected forward to 2050. Utilizes compound growth calculations based on historical and projected data. There were several categories.

Douglas showed a graph with the values and talked about it in detail.

Strategies for reduction was listed.

Community emission reduction Targets were updated with an additional option.

There was discussion.

A member of the public wanted to speak.

Corey Troiani with Texas campaign for the environment spoke.

On this agenda item option 4 is the most aggressive which falls short of what the IPCC recommends to local governments. Should be 100 percent emission reduction by 2050.

Douglas responded we can look at it to see what inputs would be required.

Bring this back and see what we need to do to accomplish and add 100 percent to the list.

**E. COE19-038** – Assistant City Manager Update:

1. Sustainability, Recycling, and Learn 2 Conserve events
2. Matrix

**CONCLUDING ITEMS**

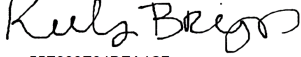
Under Section 551.042 of the Texas Open Meetings Act, respond to inquiries from the Committee on the Environment or the public with specific factual information or recitation of policy, or accept a proposal to place the matter on the agenda for an upcoming meeting AND Under Section 551.0415 of the Texas Open Meetings Act, provide reports about items of community interest regarding which no action will be taken, to include: expressions of thanks, congratulations, or condolence; information regarding holiday schedules; an honorary or salutary recognition of a public official, public employee, or other citizen; a reminder about an upcoming event organized or sponsored by the governing body; information regarding a social, ceremonial, or community event organized or sponsored by an entity other than the governing body that was attended or is scheduled to be attended by a member of the governing body or an official or employee of the municipality; or an announcement involving an imminent threat to the public health and safety of people in the municipality that has arisen after the posting of the agenda


Briggs – Would like more information on the tiny wasps (Trichogramma)

Meltzer – Dyno dirt good or bad

**Adjournment: 3:20pm**

**Approved 11/4/19**

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**Keely Briggs, Chair**

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**Kim Mankin**