



## 2010 SPET – ENERGY PROJECT PROPOSAL

### AGENDA DOCUMENTATION

**PREPARATION DATE:** August 15, 2016

**SUBMITTING AGENCY:** Energy Conservation Works & Town of Jackson, WY

**MEETING DATE:** September 6, 2016

**PRESENTERS:** Phil Cameron, Energy Conservation Works

**SUBJECT:** ECW SPET Funding For Electric Vehicle Charging Stations

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#### STATEMENT/PURPOSE

Energy Conservation Works and the Teton Village Association(TVA) request matching funds from the 2010 “Energy” SPET Fund to expand cleaner and more efficient vehicle fueling, through the installation of a two electric vehicle charging stations. This request for \$19,090 will be matched by funds already budgeted by TVA along with funds made available through Yellowstone-Teton Clean Cities’ (YTCC) Electric Vehicle Charging Rebate Program. The stations will be owned and operated by TVA with one located in the Village Lot and one in the Ranch Lot.

#### BACKGROUND/ALTERNATIVES

In the support of ECW’s listed Goal 2 – (*To partner with and support the wide array of organizations working on reducing emissions from transportation*), ECW has collaborated with the Town of Jackson and Yellowstone-Teton Clean Cities to develop this project proposal, leveraging the assets and technical expertise of each partner.

The technology exists today to install **electric vehicle supply equipment (EVSE)** infrastructure to charge **electric vehicles (EV’s)**, and **plug-in hybrid electric vehicles (PHEV’s)**. This offers the option to both residents and tourists to charge electric vehicles in the Town of Jackson. Our partner in clean transportation initiatives, Yellowstone-Teton Clean Cities, will add these station locations to the Department of Energy’s (DOE) Alternative Fueling Station Locator, to ensure national visibility of the new stations.

[http://www.afdc.energy.gov/fuels/electricity\\_locations.html](http://www.afdc.energy.gov/fuels/electricity_locations.html). As the regional designee of the DOE’s Clean Cities program the Coalition supplies the DOE with station location information. YTCC regularly communicates with rental car companies and will inform them that the EVSE’s are available in town, and encourage them to purchase more EV’s. All project partners will work to inform the community of the new charging locations.

The average energy used to “fill up” or charge a vehicle is 7.7 AC kWh. The average time charging a vehicle is 2.3 hours. Based on Lower Valley Energy utility rates, the hospital would pay approximately \$.40 per vehicle charge event. The life cycle GHGs emissions for EVs (includes vehicle manufacturing, battery manufacturing, and operation) are roughly half of those from gas powered vehicles, when considering that 82% of our local electricity is derived from hydroelectricity, this becomes one of the best places in the US to plug in and drive an EV.

“Electric vehicles (EVs) are a critical part of the American transportation future given their potential to dramatically cut global warming emissions – especially when charged by a clean electric grid\*.”-Union of Concerned Scientists Electric Vehicle Greenhouse Gas Emissions Report, Nov. 2015

The parking spots where the EVSE’s will be placed will be well marked and signed to be obvious. Familiar signage as used at existing EVSE stations in the Town will be utilized. The charging station parking spots will be free and for electric vehicles only. If another vehicle parks in those spots, they will be subject to a violation/ticket by TVA. The Dual charger in the Village lot will be ground mounted and protected by bollards, while the station in the Ranch Lot will be wall mounted at the Ranch Lot Bathroom facility. Both will be prominently placed and well signed.

In 2013 Yellowstone-Teton Clean Cities launched the Greater Yellowstone Electric Vehicle Working Group to catalyze and organize EVSE installations and EV use in the region. The Town of Jackson showed great leadership in this effort by installing the first publicly available Level 2 charging stations in the region. The Town of Jackson provided the anchor of the regional infrastructure necessary for EVs to be able to travel throughout the region. In less than a year after the Town of Jackson installed its four charging stations in 2014, the number of EV owners in town roughly quadrupled (from four to fifteen). There were > 80 different EV users who benefitted from Jackson’s EVSE stations in 2015.

The **2010 Energy SPET** was described on the ballot as:

*For the funding of energy audits, planning, design, construction of energy efficiency measures and local distributed renewable energy generation in the Town of Jackson, Teton county or component units of Teton County, and/or Special District’s buildings, structures, and/or facilities. To the extent necessary and allowed by law, the pledge to or payment of debt service and/or lease payments thereon the project.*

### **ALIGNMENT WITH ECW MISSION, TOWN STRATEGIC GOALS & COMP PLAN:**

We believe the installation of these charging stations aligns with the following priorities of the Town and ECW:

- Town Councils strategic intents – “Environmental Stewardship” and “Economic Stability”
- Town of Jackson’s new 40 x 20 Energy Efficiency goals
- ECW Mission/Purpose is to provide LEADERSHIP, IMPLEMENTATION, and EDUCATION specific to energy conservation, energy sustainability, and energy efficiency.
  - Goal #2 - To partner with and support the wide array of organizations working on reducing emissions from transportation.

### **To meet and exceed our Comprehensive Plan: Section 2, Climate Sustainability through Energy Conservation**

- **Principle 1.2 “Preserve and enhance water and air quality”:**
  - Policy 1.2.d: Improve Air Quality**
- **Principle 2.3— Reduce energy consumption through transportation**
  - Policy 2.3.a: Meet future transportation demand through the use of alternative modes**
    - Principle 7.1
    - Policy 2.3.b: Create a safe, efficient, interconnected multimodal transportation network**
      - Principle 7.2

## ATTACHMENTS

### FISCAL IMPACT

Energy Conservation Works respectfully requests 2010 SPET funds not to exceed \$19,090. The project budget below outlines the costs and sources of income for completing the project.

#### Teton Village 4-Plug EVSE Budget

<b>Expense</b>					
	\$ 6,500	Site Prep: trenching & asphalt repair			
	\$ 3,400	Base for Dual Bollard w/guard posts			
	\$ 5,700	Electrical labor			
	\$ 403	Permit			
	\$13,868	EVSE Equipment			
	\$ 1,120	Commercial Data Plan			
Subtotal	\$30,991				
	\$ 3,099	10% contingency			
<b>Total</b>	<b>\$34,090</b>	<b>Total w/10% contingency</b>			
<b>Funding</b>					
	\$5,000	EVSE Rebate (post completion)	YTCEC	Pending	15%
	\$10,000	Capital Project Funding	Teton Village Association ISD	Confirmed	29%
	\$19,090	ECW 2010 SPET Funding (Not to exceed)	Energy Conservation Works	Pending	56%

### STAFF IMPACT

### LEGAL REVIEW

2010 Energy SPET Funds have previously been awarded to the Teton Village Association.

### RECOMMENDATION

Energy Conservation Works Joint Powers Board recommends funding from the 2010 SPET, not to exceed \$19,090, for the installation of two, dual electric vehicle charging stations at Teton Village Association.

### SUGGESTED MOTION

I recommend funding from the 2010 ECW SPET, not to exceed \$19,090, for the installation of two twin-electric vehicle charging stations at Teton Village Association.