

**Contract No. R-038-048**  
**“Fargo's Smart Energy Ramp”**  
 Submitted by eSmart Systems US, Inc.  
 Principal Investigator: Terry Sando

**PARTICIPANTS**

<b>Sponsor</b>	<b>Cost Share</b>
City of Fargo	\$ 50,000
Kilbourne Group	<u>\$ 20,000</u>
Subtotal Cash Cost Share	\$ 70,000
eSmart/Microsoft	\$40,000
Kilbourne Group	\$20,000
Border States Electric	\$10,000
Xcel Energy	<u>\$40,000</u>
Subtotal In-Kind Cost Share	\$110,000
North Dakota Industrial Commission	<u>\$305,000</u>
Total Project Cost	\$610,000

Project Schedule – 18 months  
 Contract Date – December 15, 2018  
 Start Date – December 1, 2018

Project Deliverables	
Quarterly Report	March 31, 2019 ✓
Quarterly Report	June 30, 2019
Quarterly Report	September 30, 2019
Quarterly Report	December 31, 2019 ✓
Quarterly Report	March 31, 2019
Final Report	June 30, 2020

**OBJECTIVE/STATEMENT OF WORK:**

Fargo’s Smart Energy Ramp project objective is to demonstrate how a Smart Clean Energy Package that includes renewable energy and artificial intelligence (AI) can add value, cost-effectively attract tenants, and enhance economic development while making efficient use of the utility grid in a public-private partnership. A guide will be developed for developers and cities on how to cost-effectively include such a Package in the design of future new construction or remodels to further enhance economic development. The ability to use high tech (e.g., AI) and sustainability should make cities more attractive to new high-tech industries and the workers they want to attract.

The project will involve on-site solar, battery storage, Electric Vehicle (EV) charging, and intelligent (AI) control at the Roberts Common mixed-use facility (city parking ramp with a private residential and commercial wrap) to optimize the use of renewable energy while minimizing the impact on the utility grid. Meters and submeters will be used to consider managing the impact of renewables and EV charging on an efficient and reliable use of the grid.

**STATUS:**

The contract has been executed.

**April 2019**

Status report received. The report stated that the equipment has been specified during this period and a bid received.

**February 2020**

Status report received. The report stated the following:

We had some issues concerning finding the right type of battery storage system with which we could communicate. The issue was finally resolved. The equipment was re-specified and then purchased. An electrical contractor has been selected to install the equipment.

We note that the EV Charging equipment is not currently anticipated to be paid for in this project. Due to higher than expected costs on some equipment (e.g., Lighting controls) and extra labor (e.g., equipment specification), we applied to the North Dakota Department of Environmental Quality (ND DEQ) for funds to cover the EV Charging equipment. We have been notified that we were selected for an award – which would cover the cost of the EV Charging equipment.

Updated 2/5/2020