EV Range Map

Systems & Electronics Division
Sumitomo Electric Industries, Ltd.

Date: October, 2021

Energy management solutions for EV

Personal Info. (behavior, etc.)

Weather Info.

AI

SUMITOMO ELECTRIC

Power Plant Info.

Traffic Info.

Vehicle Info.
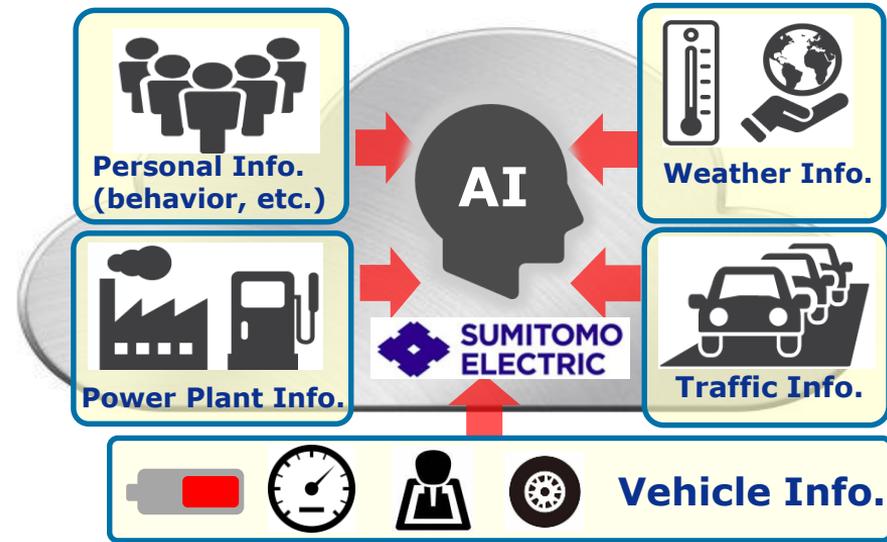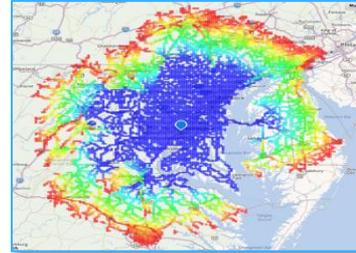
EV Range Map

EV Charge Route Guidance

SOC

Distance

Charging recommendation

To solve the EV's range anxiety by providing EV range map, recommended EV route and charging plan with better accuracy using AI technology.
This solution is useful for ridesharing or fleet vehicle also.

SUMITOMO ELECTRIC

SUMITOMO ELECTRIC GROUP
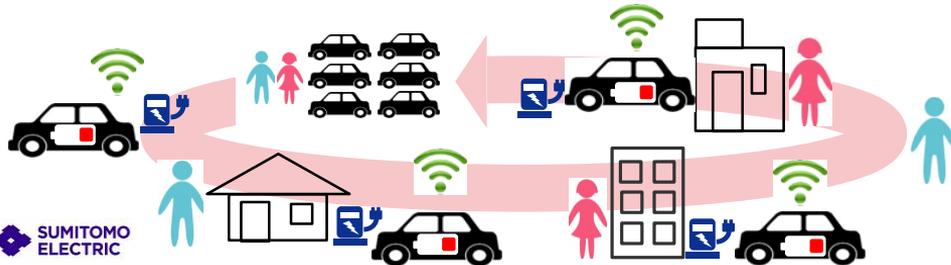
AI-based Predictive EV Range Map

Overview

Battery Level

|	
—	Over 2,500wh
—	2,000wh~2,500wh
—	1,500wh~2,000wh
—	1,000wh~1,500wh
—	500wh~1,000wh
—	Under 500wh
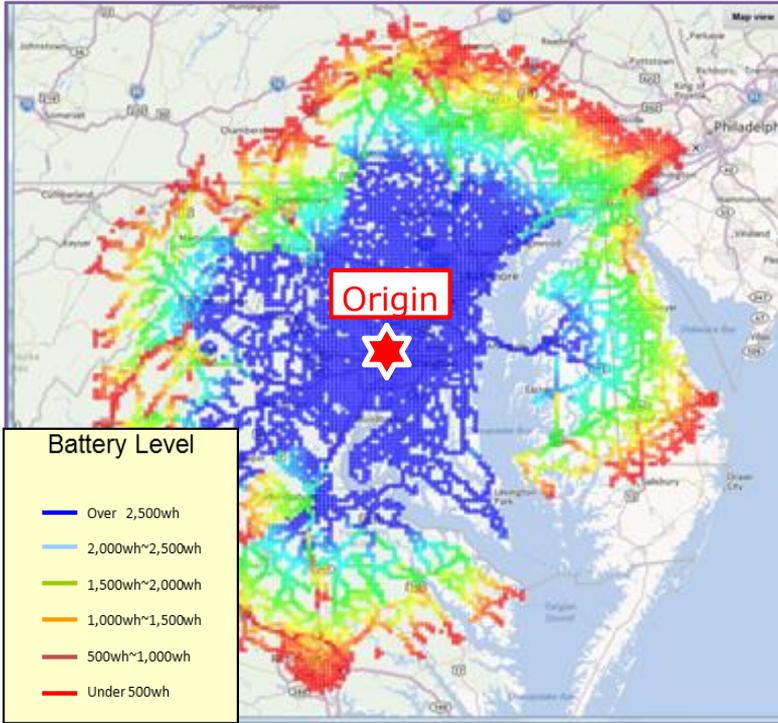
Origin

Features

▪ Our high precision range map tells you exactly how far you can get from the origin.

▪ The range varies depending on the road gradient, road congestion, temperature and vehicle characteristics.

Ave. **88.4%** Accuracy

Actual
Prediction
Accuracy

Comparison of prediction and actual consumption

SUMITOMO ELECTRIC

SUMITOMO ELECTRIC GROUP
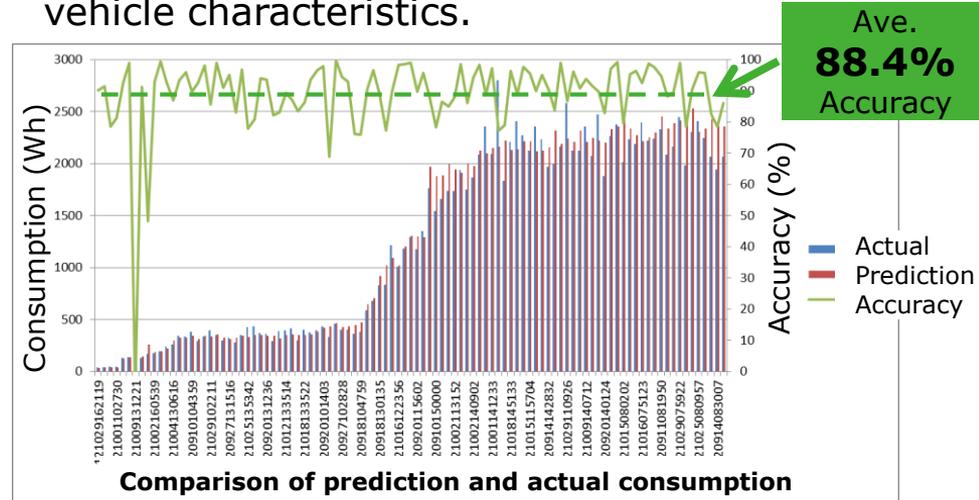
Easy Charge On-the-Go Route Guidance

Overview

Features
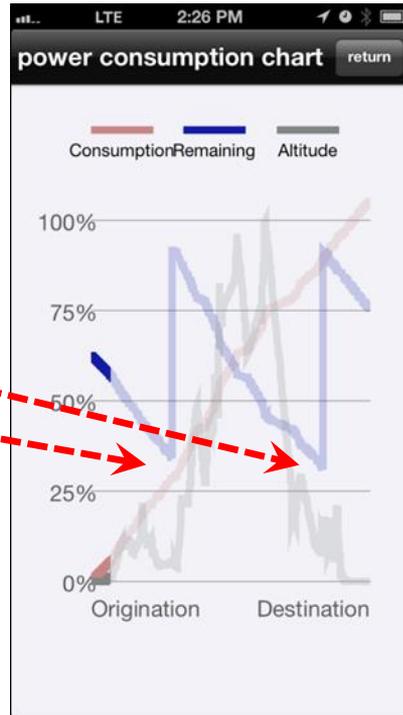
- Our EV route guidance tells drivers everything they need to know to get to the destination without anxiety.

- All they need to do is to input where they want to go, and the software will calculate the most cost-efficient route with a recommended plan of where and when to quick-charge on the way.

- When you go up the hill, the battery % declines quickly, but when you go down the hill, it increases due to the regeneration.

- Builds trust with the EV drivers by showing the reason behind its calculation.
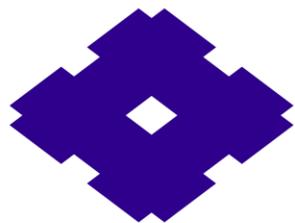
SUMITOMO ELECTRIC

Connect with Innovation

https://sumitomoelectric.com/