

IEEE Transportation Electrification Initiative

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**IEEE TRANSPORTATION
ELECTRIFICATION**

 **IEEE**
Advancing Technology
for Humanity

IEEE is the world's largest professional association dedicated to advancing technological innovation and excellence for the benefit of humanity. IEEE and its members inspire a global community through IEEE's highly cited publications, conferences, technology standards, and professional and educational activities.

IEEE's core purpose is to foster technological innovation and excellence for the benefit of humanity.

To expedite the use of world changing technology, the IEEE has begun the development of Initiatives. The IEEE Transportation Electrification Initiative is one of these important Initiatives.

Our Mission, Purpose and Pitch

- Driving the transformation for clean, efficient, connected and safe vehicles
- Multi mode support for cars, trucks, equipment, trains, ships, airplanes and more
- A forum to build networks, foster relationships, and encourage participation among the Transportation Electrification community worldwide
- A platform to innovate, create and collaborate on all aspects of vehicle electrification
- Tell the world that the IEEE is a major player in the new transportation industry

Our Challenge - Energy Equivalency

Gas

1 Gallon



135 MJ
of energy

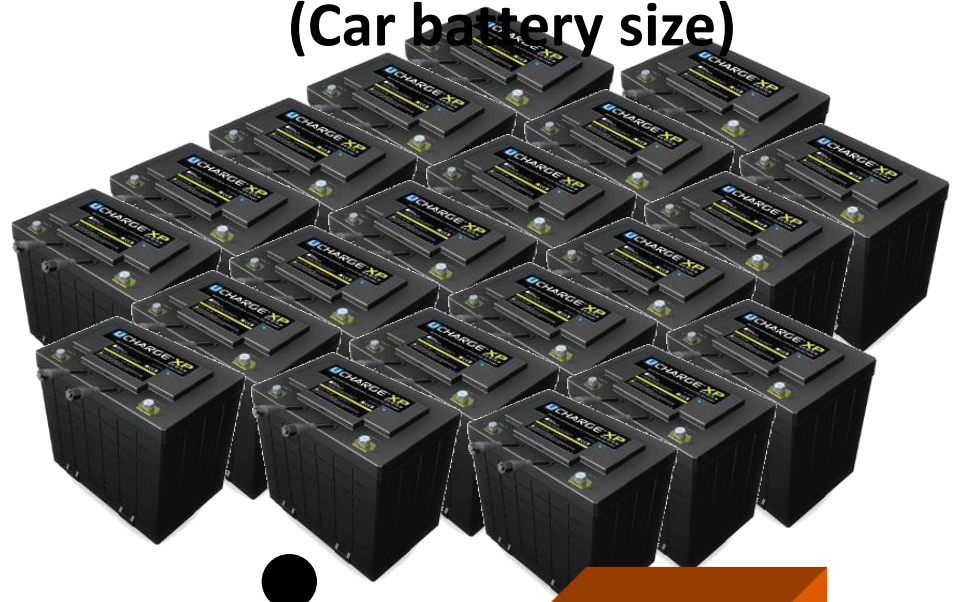


2.7 kg



Batteries

21 Li-ion batteries
(Car battery size)



340
kg

54 gal

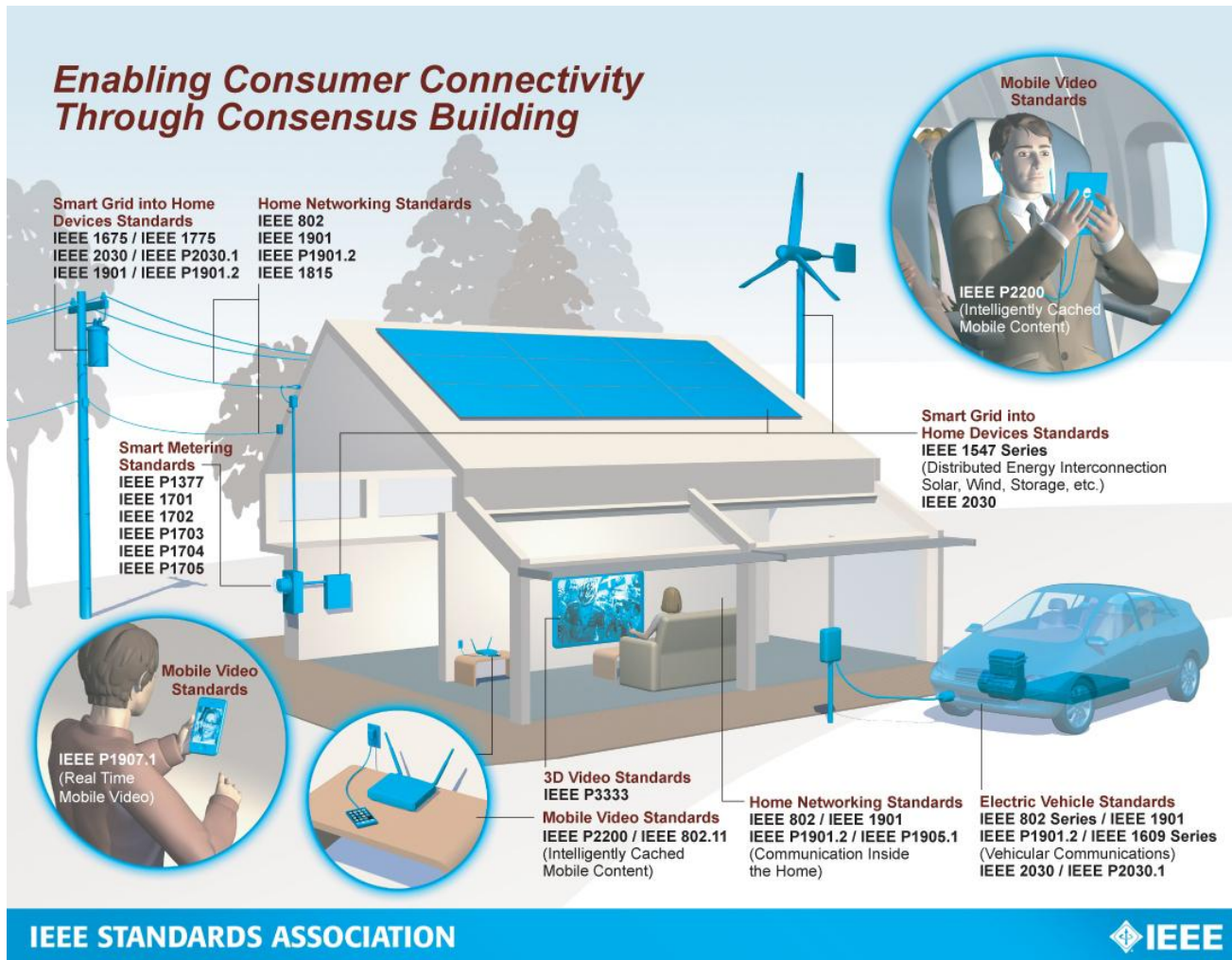
Our Goal – Build the perfect energy system

- High energy density (300 mile range per charge)
- Reliability
- Safety
- Cost comparable to liquid fuels
- Long life and a fast charge
- Batteries that recycle with low impact to environment
- Bi-directional energy flow

Transportation of the future must be clean, efficient, connected and safe



Only the IEEE can integrate the new world of transportation



2013 TE Roadmap

Q1

Q2

Q3

Q4

Conferences

- SAE World Congress 2013
4/16-4/18
- SAE AeroTech 2013
September 2013
- SAE Convergence 2013
October 2013
- ISGT 2013
2/24-2/27
- ITEC 2013
6/16-6/19
- PHM 2013
6/24-6/27
- VEC/IEVC 2013
November 2013
- ICCVE December 2013

Outreach

- Partner with SAE/ EDTA Speaker/Panel Discussion (Ongoing MOUs)

Portal & Comm.

- Continue Public Visibility Campaign ,Branding and Promotion
- By Line Articles and Interviews
- Develop the Brand

Publications

- EV Magazine
(PES Lead S/C)
- e-newsletter
(TE Community Benefit)
- P1 Transactions

Education

- Build Library e-learning, Video of Conference Talks, Section/Chapter Talks

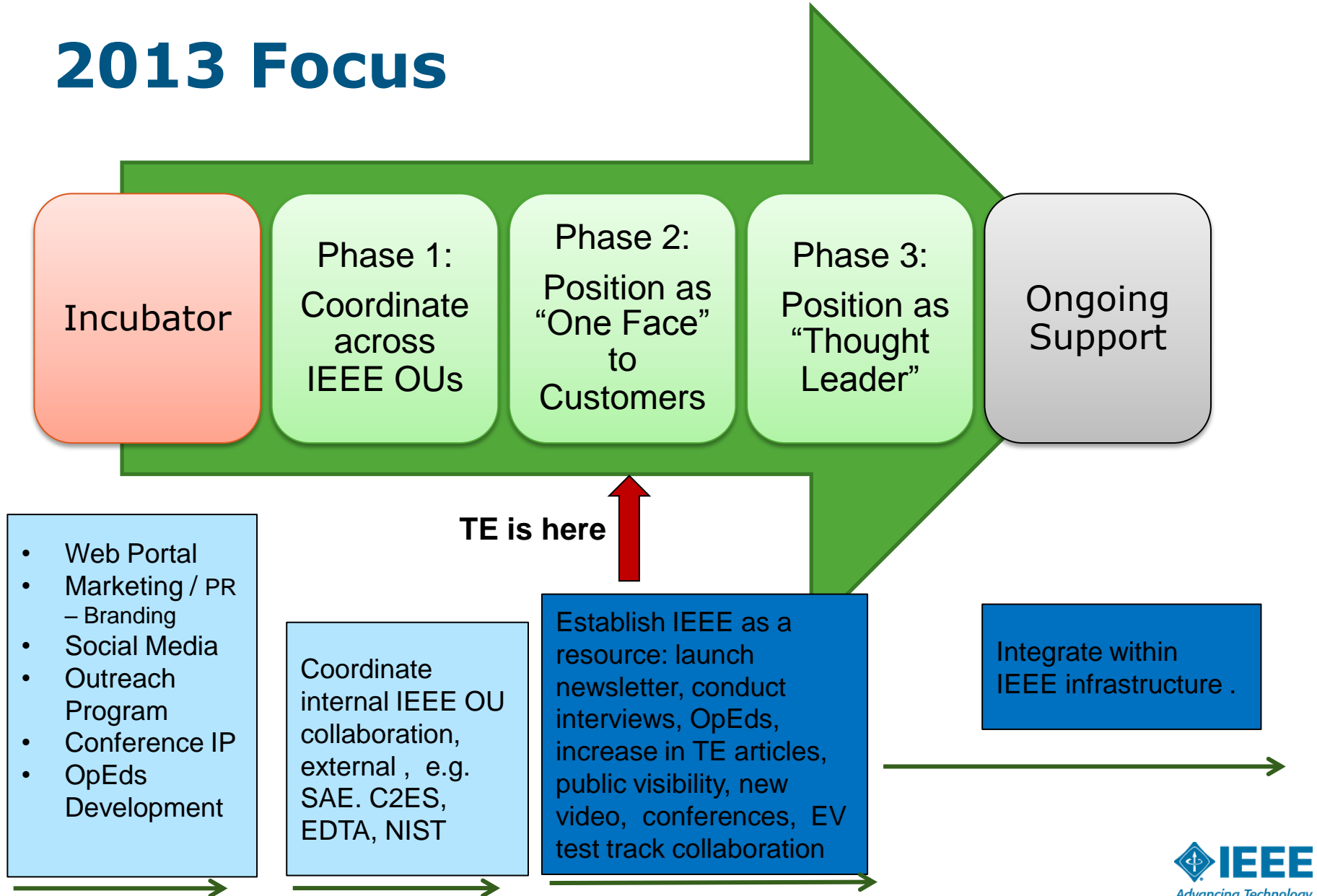
Standards

- IEEE P2030.1 Draft Guide for Electric-Sourced Transportation Infrastructure promotion and support
- Standards Vision Project Promotion and Support
- Wireless Charging Working group

Test Track

- Test Track Inaugural Event

2013 Focus



Community Building in 2013

- ❑ **Web Portal** <http://electricvehicle.ieee.org/>
- ❑ **Email** tei@ieee.org
- ❑ **Social Media**
 - **Twitter** @ieeetei
 - **Facebook** (IEEE Transportation Electrification)
 - **LinkedIn** (IEEE Clean Transportation)
 - **Flipboard** (IEEE Transportation Electrification)
- **Industry Newsletter**
- **Conferences**
- **Publications**
- **Standards Development**
- **Relationship Building with Academia, Government, Industry, Industry Organizations and Media**
- **Build the industry's biggest database of people / companies**
- **Economic Development**



LinkedIn YouTube

Communications is Important

IEEE Transportation Electrification
Driving the transformation for clean, efficient, connected and safe vehicles <http://electricvehicle.ieee.org>

By Lee Stogner
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INSIDE

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11:30 AM 8/1/2013

IEEE Test Track / University Cooperative – Project Green



Project Green is a joint economic development initiative between CU-ICAR and SCTAC with the purpose to redevelop a significant part of the airport property into a unique test bed for public and private stakeholders in the domain of sustainable mobility and vehicle to infrastructure connectivity

Collaborative IEEE / Industry Partners



IEEE Future Directions

SAE International®

Industry Scope



Future Plans

- **Gap Analysis to determine where resources will be needed in 2014**
- **Continue to integrate the efforts of the 19 different IEEE Societies and Councils**
- **Invite more industry partners to participate**
- **Make the IEEE the “Go To” organization for electrified transportation**
- **Help the world reduce the transition time to electrified transportation**



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