

California Plug Load Research Center Workshop

The Seventh Semiannual Workshop on Energy Efficient Plug Loads

May 12, 2015



Dr. G. P. Li

California Plug Load Research Center

California Institute for Telecommunications and Information Technology

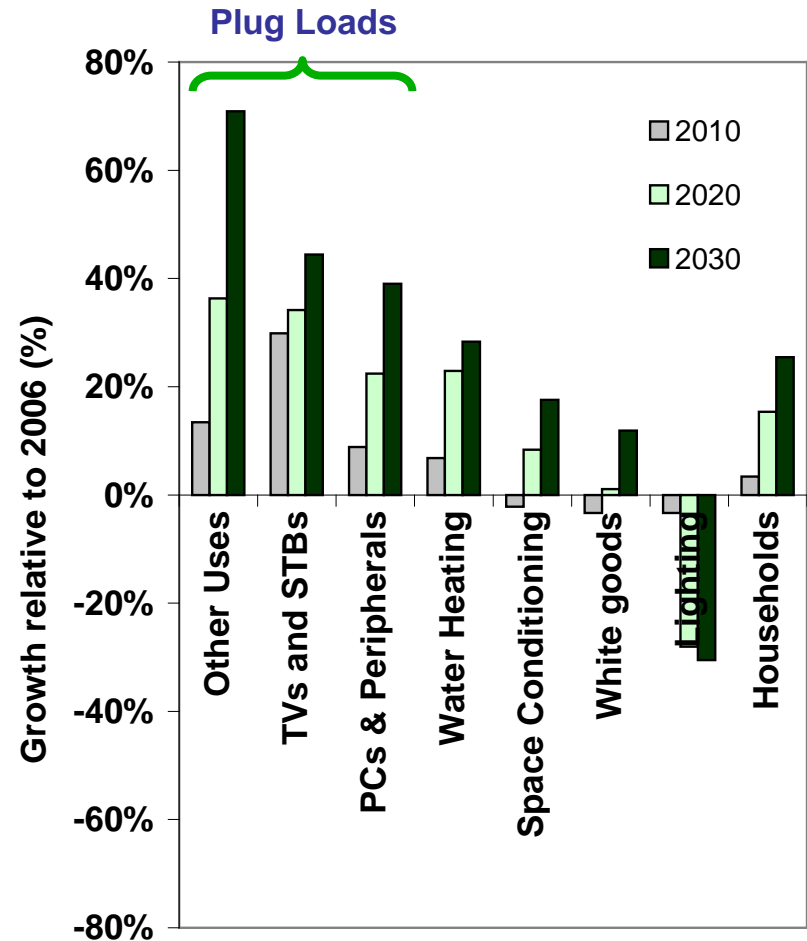


Creating Connections. Powering Innovation. Boosting Efficiency.

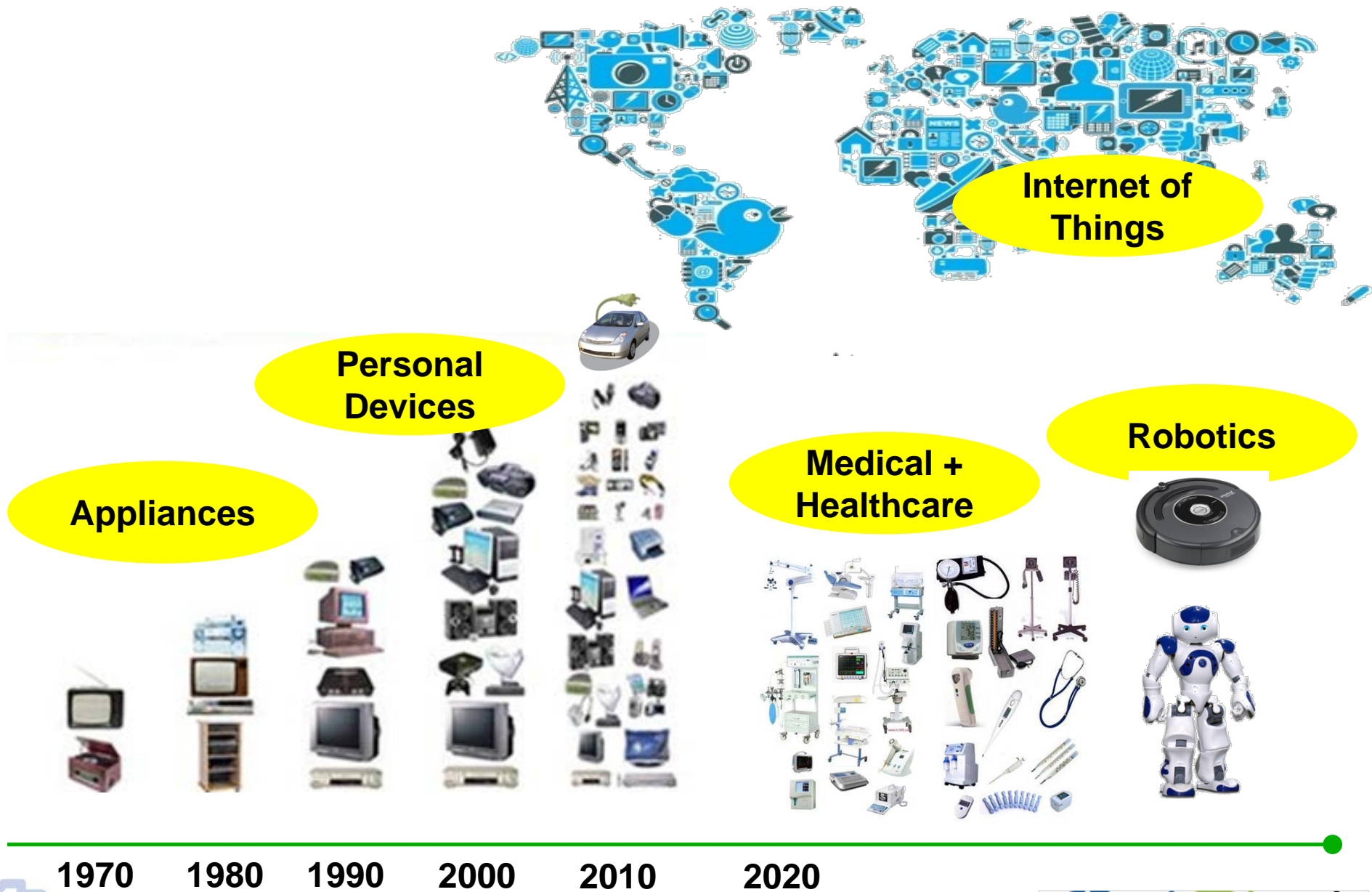


CalPlug Purpose

- Help California and U.S. improve energy efficiency in appliances and electronic devices
- In the residential and commercial sectors
- Through research, demonstration, education
- About engineering, incentives, codes and standards, and user behavior



Residential and Commercial Plug Loads

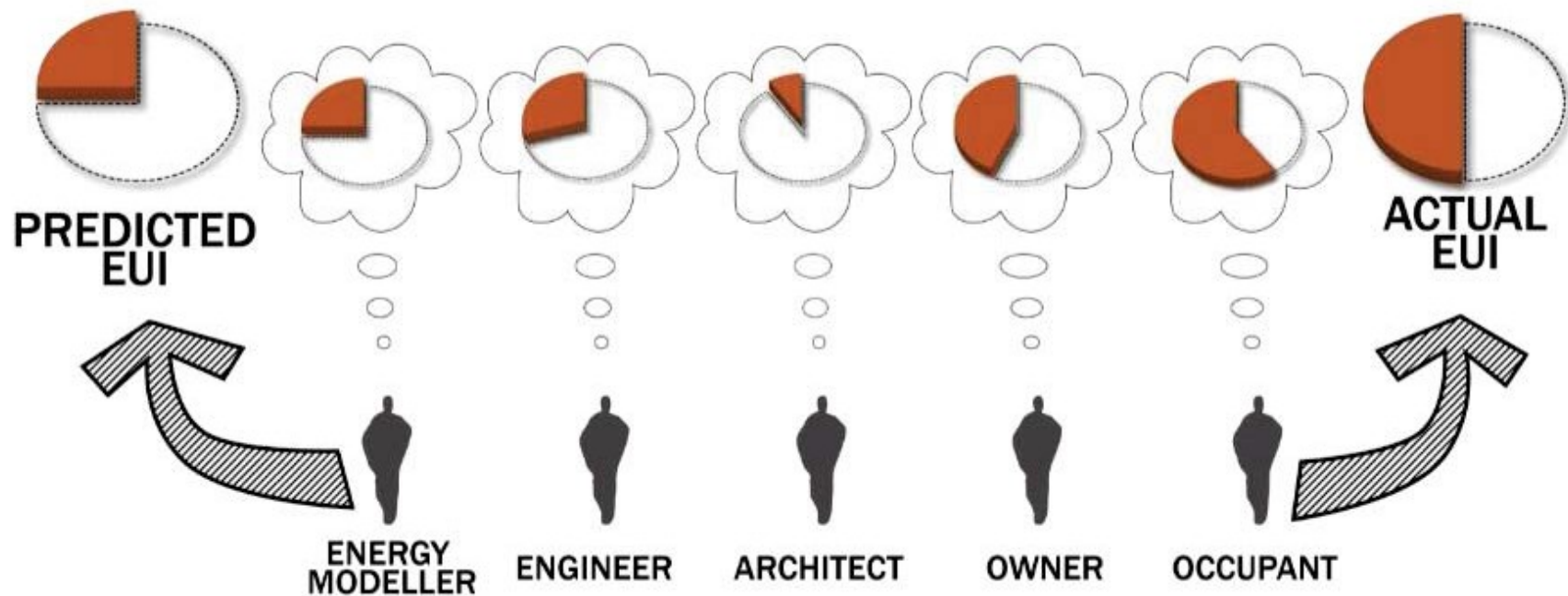


1970 1980 1990 2000 2010 2020
Creating Connections. Powering Innovation. Boosting Efficiency.

Integrating ZNE Building Design with Personal Energy Footprint Management

ENERGY USE

PREDICTED vs. ACTUAL



Clark Brockman, AIA LEED Fellow

Principal, SERA Architects

CalPlug Workshop

➤ **Goal:**

To have an open format for plug loads information exchange and to accelerate their energy efficiency by all means including innovation in hardware and software, codes and standards, and incentives and rebates

➤ **Anticipated outcome:**

To create an energy efficiency working group for strong collaborations among players including research centers, manufacturers, service/content providers, utilities and government agencies



CalPlug Workshop

- **Morning sessions** will report EE progresses in small network equipment, small data center, and smart power.
- **Afternoon sessions** will report energy saving opportunities and challenges in idle power, PC power management, and cloud based solutions.
- **Afternoon networking reception** including lab demos by students.

APS II From Bench to Market

Manufacturers

SIEMENS

embertec
ENERGY EFFICIENCY TECHNOLOGIES

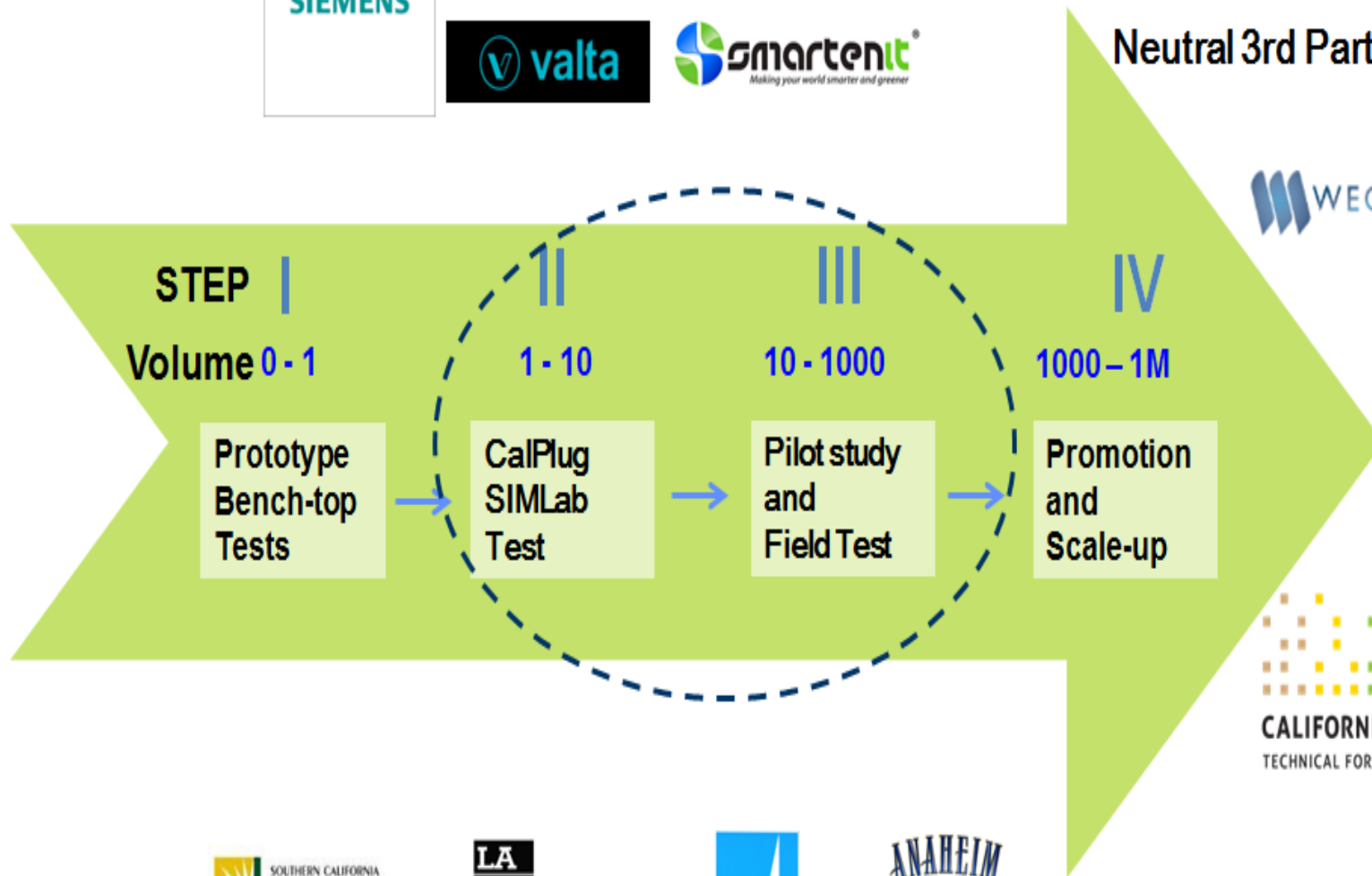
TrickleStar
Conserving energy. Improving life.

valta

smartenit
Making your world smarter and greener

Neutral 3rd Parties

WECC



Utilities

SOUTHERN CALIFORNIA
EDISON
An EDISON INTERNATIONAL Company

LA
DWP
Los Angeles
Department of
Water & Power

PG&E

ANAHEIM
PUBLIC UTILITIES

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CalPlug
CALIFORNIA PLUG LOAD RESEARCH CENTER

Acknowledgements

- **CEA and its member companies for support and guidance in STB, PC power management, Energy reporting**
- **CEC and CIEE – support for PIER projects at CalPlug**
- **CalPlug member companies and sponsors**
- **Speakers and panel members**
- **CalPlug staff and students**

**We welcome
opportunities for
collaboration.
Thank you!**

