

# *Looking Beyond the Horizon*

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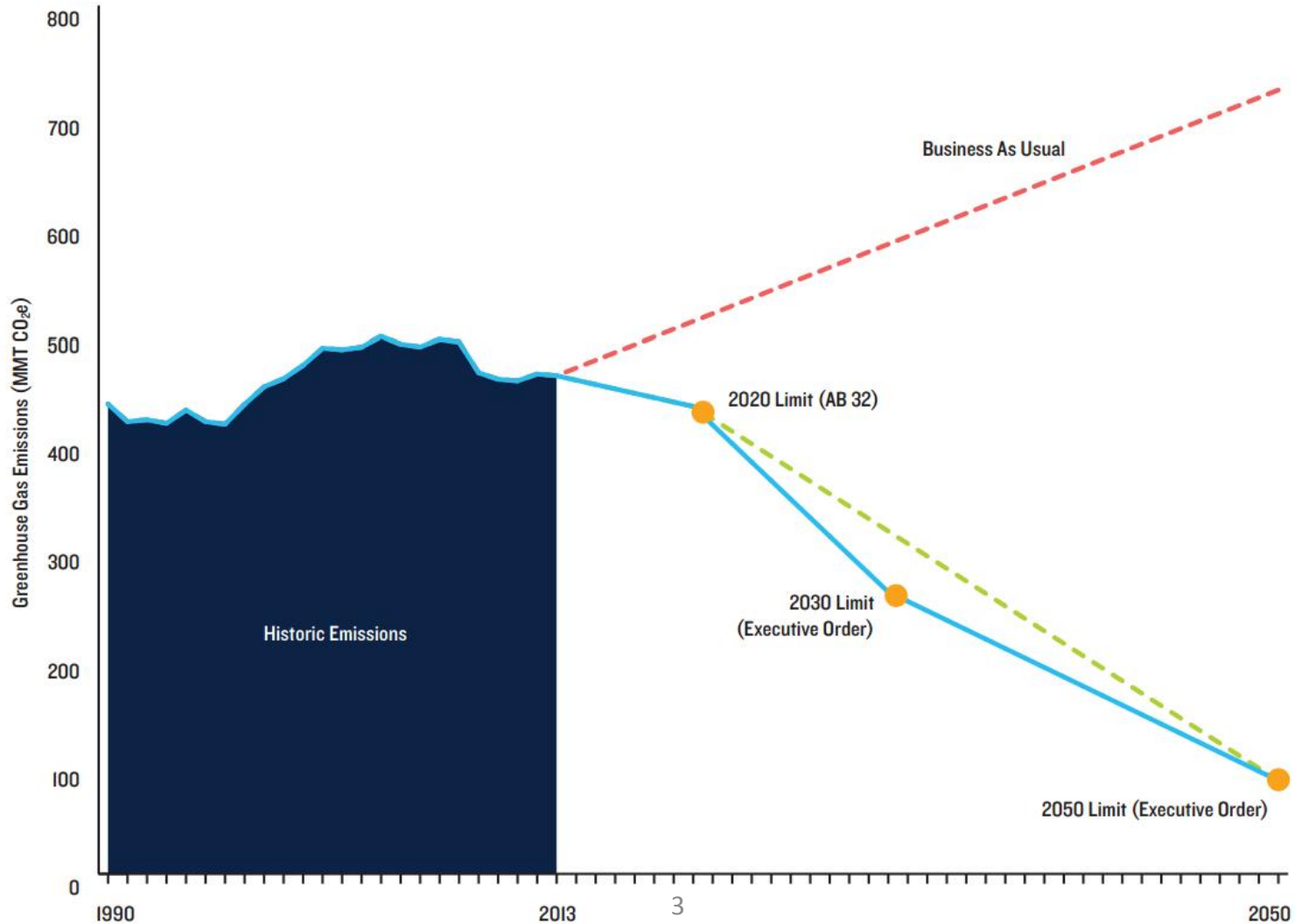
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# The Next Level of EE: The Five Challenges Ahead

- Dramatically increase the **magnitude** of savings
- **Diversify** the sources of savings
- Measure and ensure the **persistence** of energy efficiency savings
- Integrate energy efficiency savings within a **carbon** reduction framework
- Understand and value energy efficiency as part of an **evolving grid**

*Electricity Journal, Vol. 28, Issue 7, Sept. 2015.*

# California's Greenhouse Gas Emission Reduction Goals



# New Tools for EE's Next Level

- **Intelligent efficiency** (smart meter data, advanced analytics, sensors, etc.)
- **New technologies** (lighting, HVAC, plug-in loads)
- **Behavior** interventions and information
- Leveraging public **financing** and private investment
- **Localized EE** (energy/water/climate goals)

NOTE: Tools should be used in **combination** (e.g., programs that combine advanced data analytics with behavior interventions)

# The Future of EE (Through IE)

- Data-driven, segmented opportunity **targeting**
- **Remote assessments** at very low cost/time
- Equal focus on retrofits and **operational**
- Holistic, **‘whole-building driven’** EE
- Savings **persistence** ensured
- Location and grid integration valued

*“Scale, Speed, and Persistence in an Analytics Age of Efficiency: How Deep Data Meets Big Savings to Deliver Comprehensive Efficiency”, D. Grueneich and D. Jacot, Electricity Journal, April 2014.*

# Next Level of Energy Efficiency – Upcoming Publications

- New Tools and Opportunities
- Updated Policy Framework
- Harnessing Market Forces

# Thank You!

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