

# **Energy Efficient Set-Top Boxes: A Challenge for Everyone**

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# Reflections

- EEDAL 97
- Code of Conduct
- Energy Star
- IEA standby power meetings
  - STBs lurking in the background
- IEA STB meeting in 2004

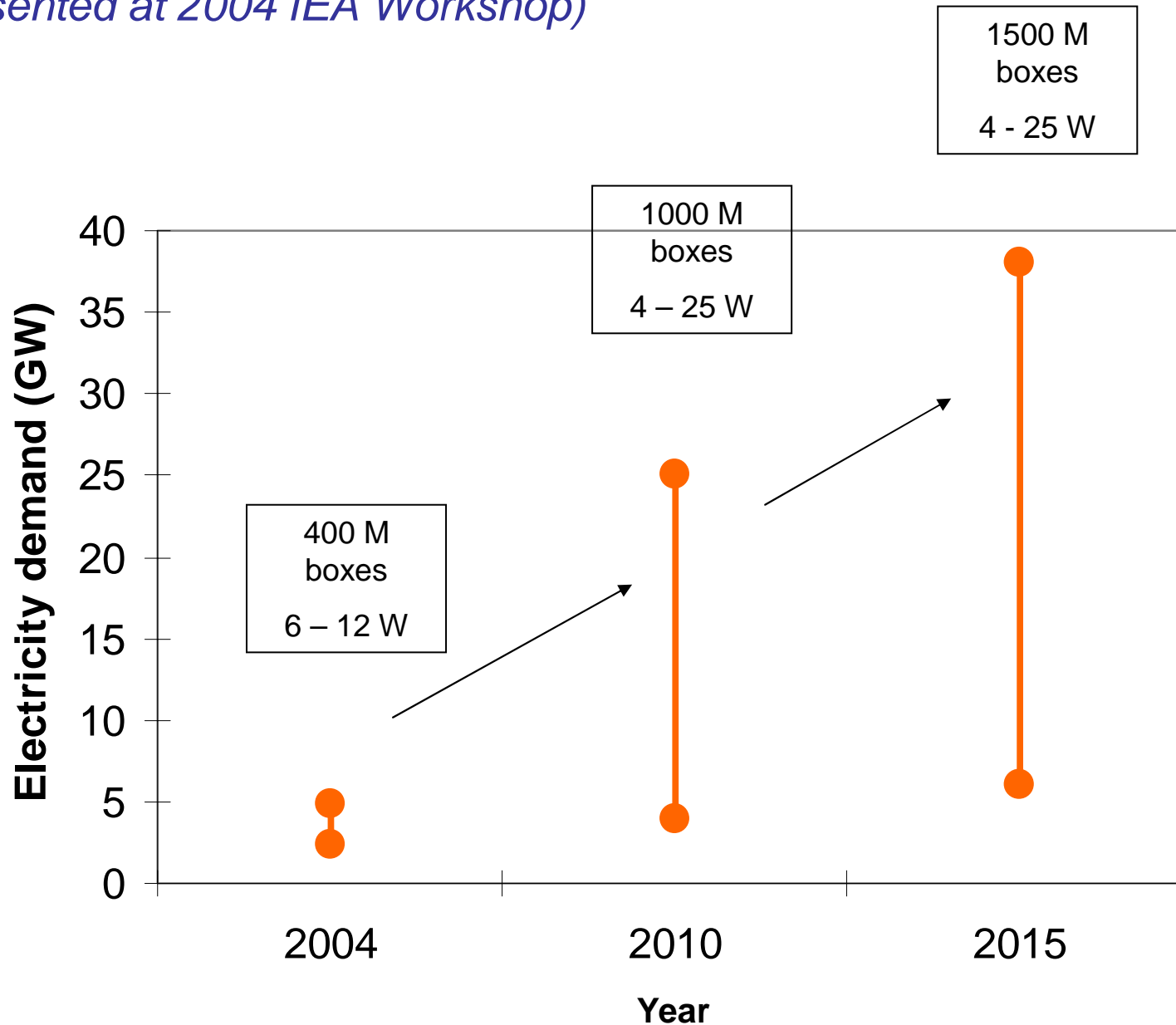
# IEA STB Meeting 2004

- Agreed that STBs represented potentially large future energy use
- Recognized that STBs differed from other products because of the service provider's unique role
- Identified DTAs as an immediate problem
  - Simple enough to treat separately and quickly
  - Industry agreed that regulation might be justified
  - Unexpected outcome: recommended power levels emerged
- Agreed that “complicated” STBs needed to be addressed later

# Uncertain Energy Future for Set-Top Boxes

*(presented at 2004 IEA Workshop)*

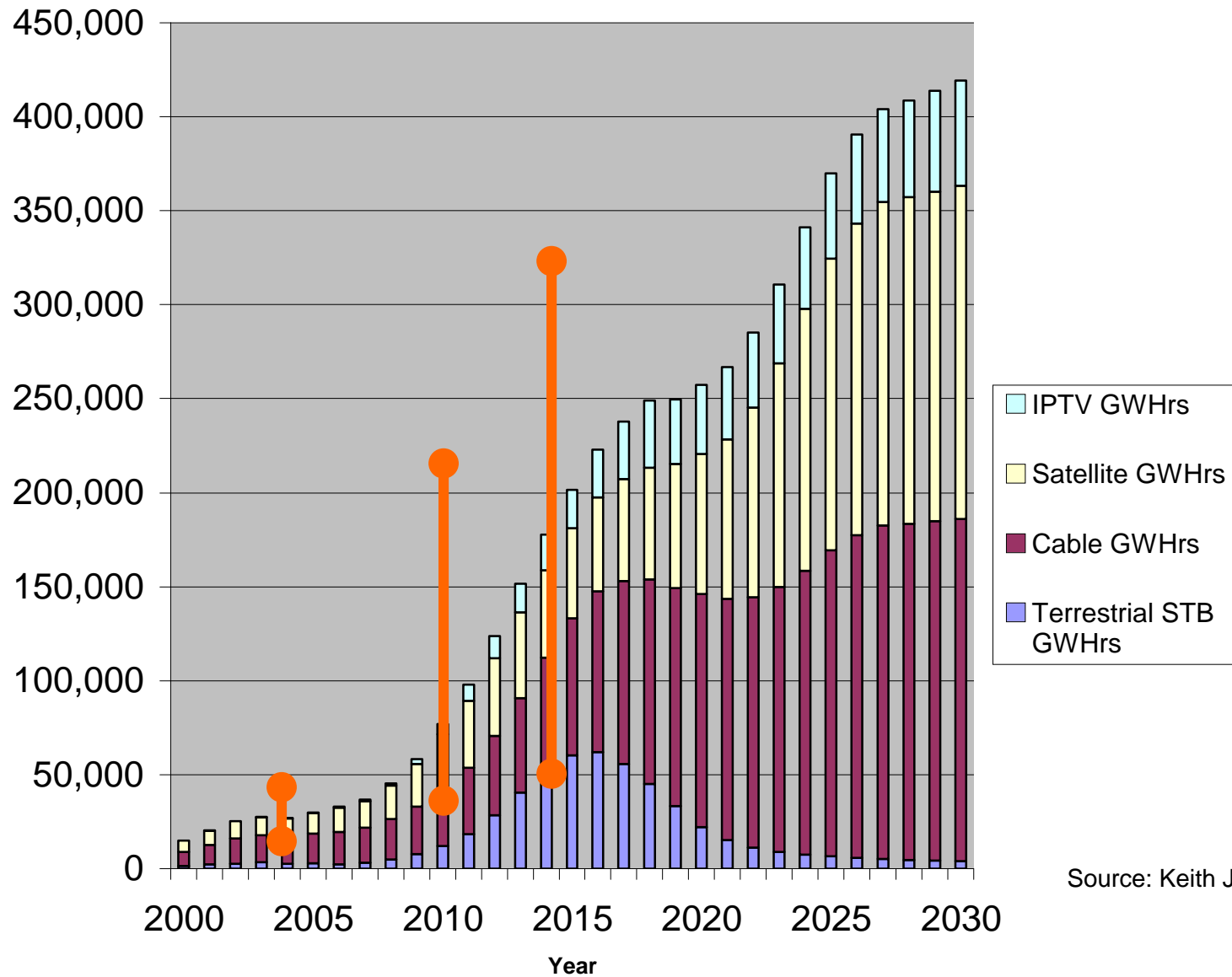
~Large  
power  
plants



# Since Then...

- IEA's recommended DTA specifications
  - Energy Star withdraws STB specification
  - Australia, Korea, China now adopting
- STB market & potential energy use grows
  - New energy-using functionalities & technologies (hard disk, multiple tuners)
  - More boxes?

# Updated Forecast of STB Energy Use



Source: Keith Jones

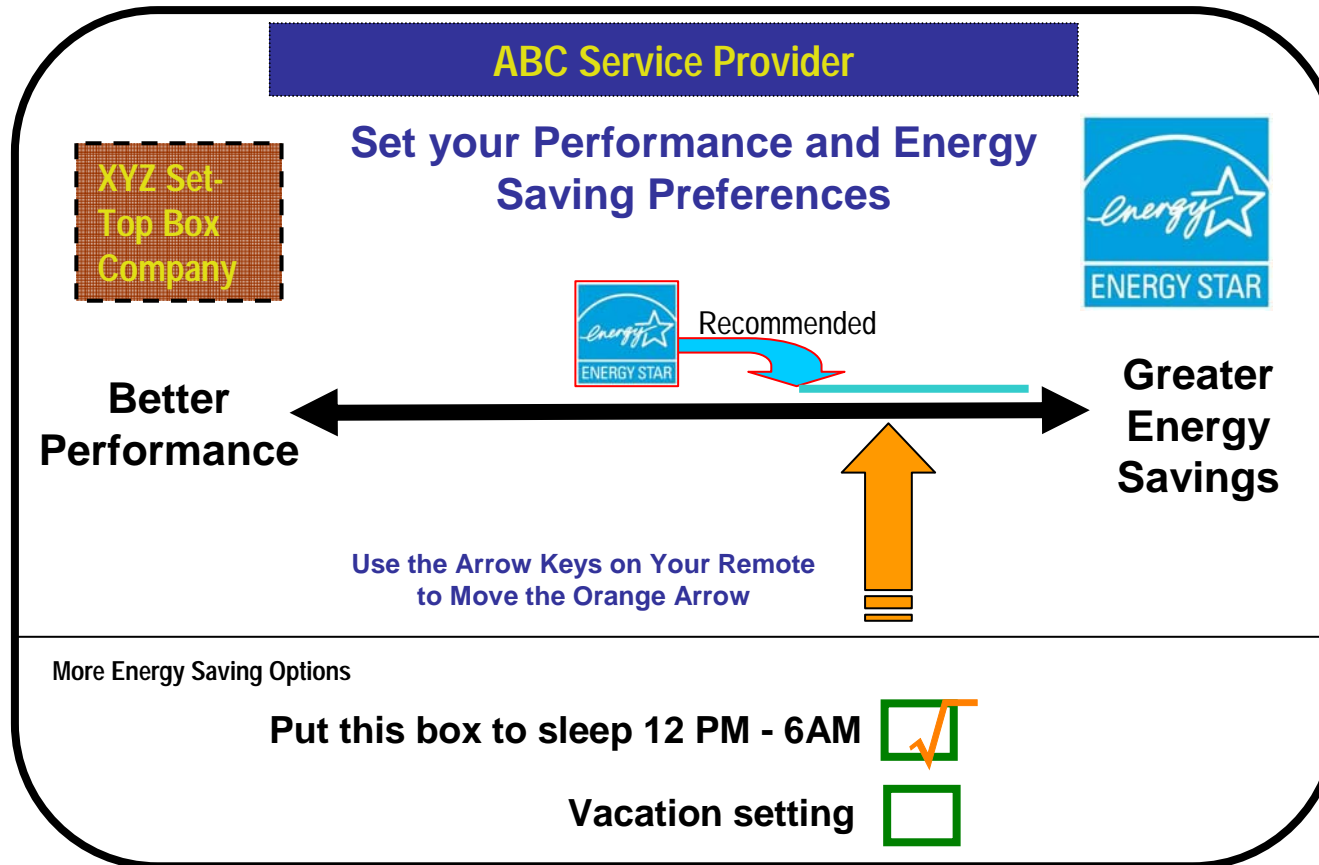
# We Still Don't Know

- Which components can be made more efficient?
- What kinds of power management can be achieved in the box and at the head end?
- How to encourage greater efficiency while STB functionality is rapidly evolving?
- How to deal with evolving relationships between service providers and box manufacturers?
- How to manage downstream energy consumption by connected devices?

# This Week

- Address the “complicated” STBs
    - While not forgetting the simple boxes
    - Looking forward to broader network issues
  - Explore harmonised approaches to
    - Roles and responsibilities of major groups
    - Power levels & modes
    - Identification of “simpler” complicated boxes for early action
- ..... With the goal of saving more energy, at a lower cost to everybody

# Example of User Information - - An “Energy Control Panel”



# Control Panel with European A - G Rating

