# **Smart Energy Ecosystems**

**Gary Atkinson** 

Director of Embedded Marketing



4th Annual Smart Grids & Cleanpower 2012 Conference 14 June 2012 Cambridge

www.cir-strategy.com/events



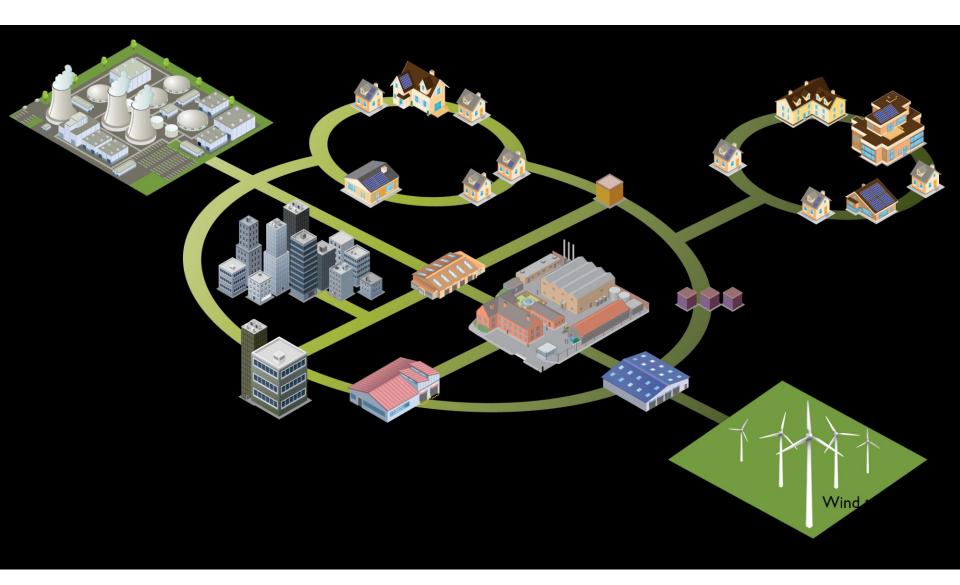
#### World's Most Prevalent Architecture

- 95% of all Mobile Phones
- Embedded in Everything
- ■~8 Billion in 2011
- >80% Smart Meters
- Connected Appliances
- Soon: Servers for ADR





## **Smart Energy Ecosystems**





#### **Consumer Concerns**



#### **Consumer Concerns**



RESIDENTS DECLARE HORNBY IS **METER FREE ZONE** D A SMART

Smart Meter Resistance Spreads to SoCal: Are New

Wireless Mete

Smart Grid Resistance: Woman Arrested For Trying to Ston Smart Motor

Vancouver Rallies: Smart Meter Resistance Builds

# RefuseSmartMeters.com

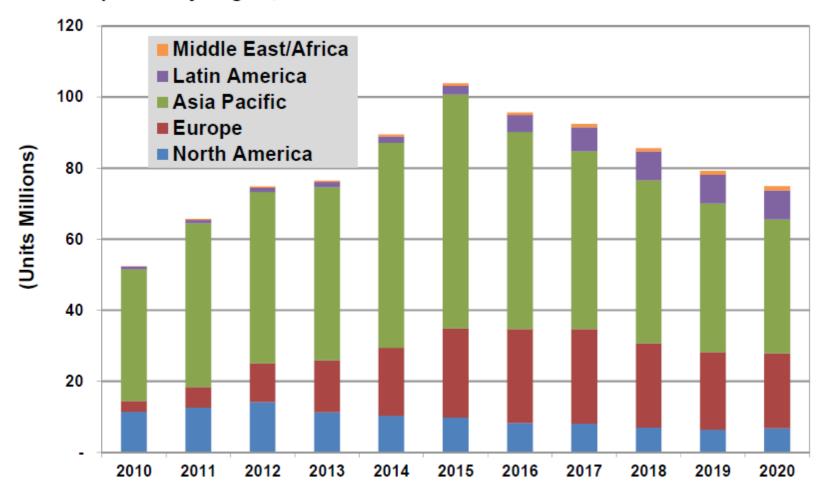


IMMEDIATE ACTION REQUIRED, POST REFUSAL SIGN OR LABEL NEAR YOUR METER



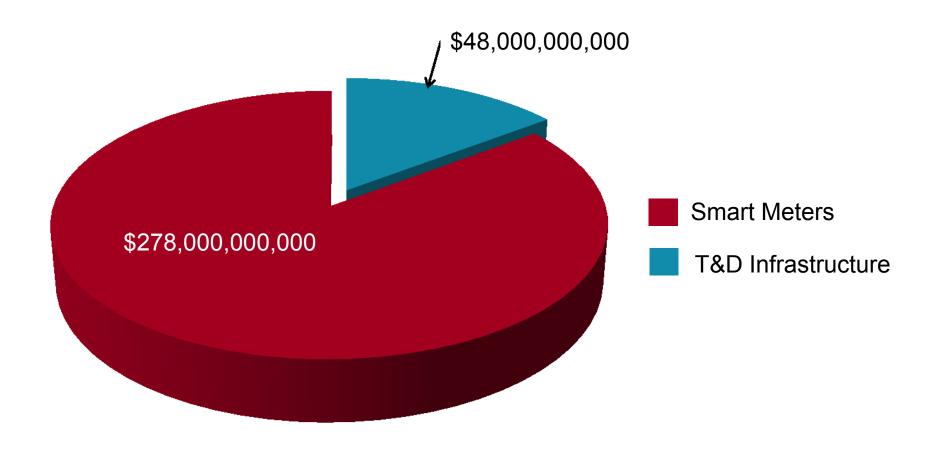
## **Smart Meter Shipments Growing**

Smart Meter Shipments by Region, World Markets: 2010-2020



(Source: Pike Research)

# **Projected Smart Grid Investment - 2017**



#### **Deployment Challenge**

"The deregulated structure of the UK market is uniquely challenging for rapid and co-ordinated action in a large scale initiative like this and we believe that smart meter deployment in 65 per cent of UK homes by 2015 is not possible. There is a great deal of work still to do to finalise the technical and regulatory framework for smart metering,"

The European Market for Smart Meters Report, Sentec, 2012



### **Smart Home Energy Management**



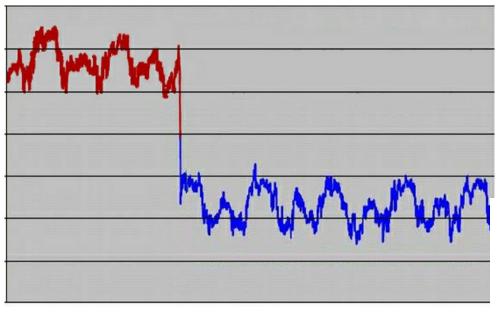
### Low Power Design - Global Deployment





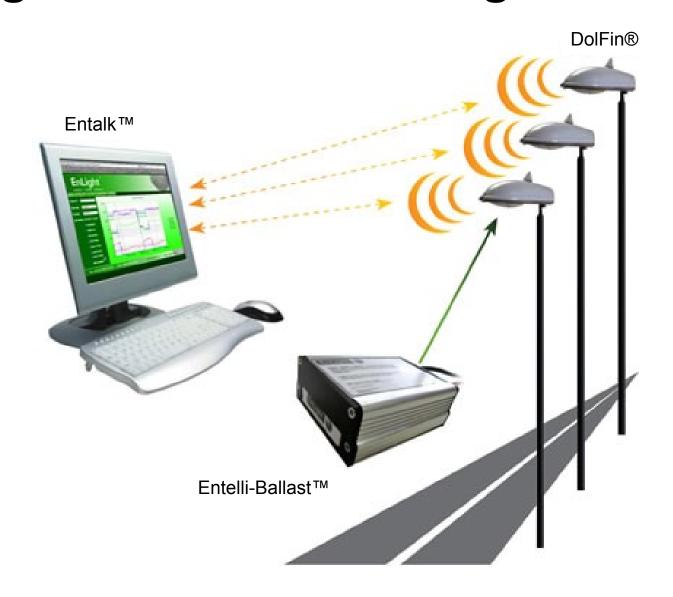


## **Voltage Rectification**





### **Streetlight Revolution - EnLight**





### **Technology to Improve Motor Efficiency**

42% of all electricity used powers industry



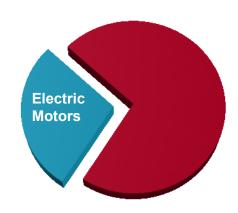
2/3
of this is used by electric motors



28%
Global energy consumption





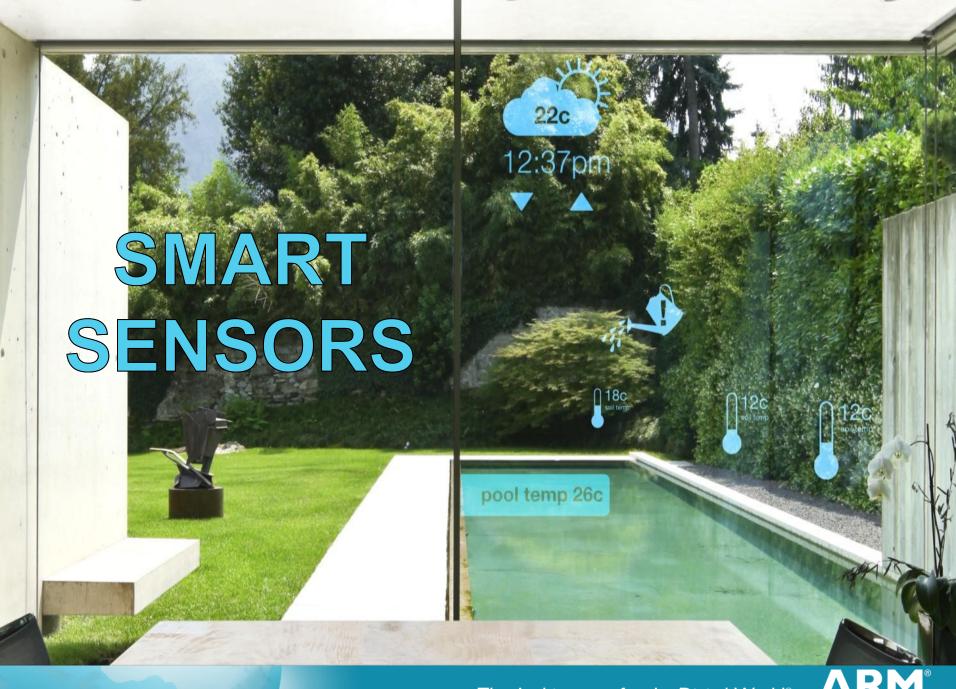


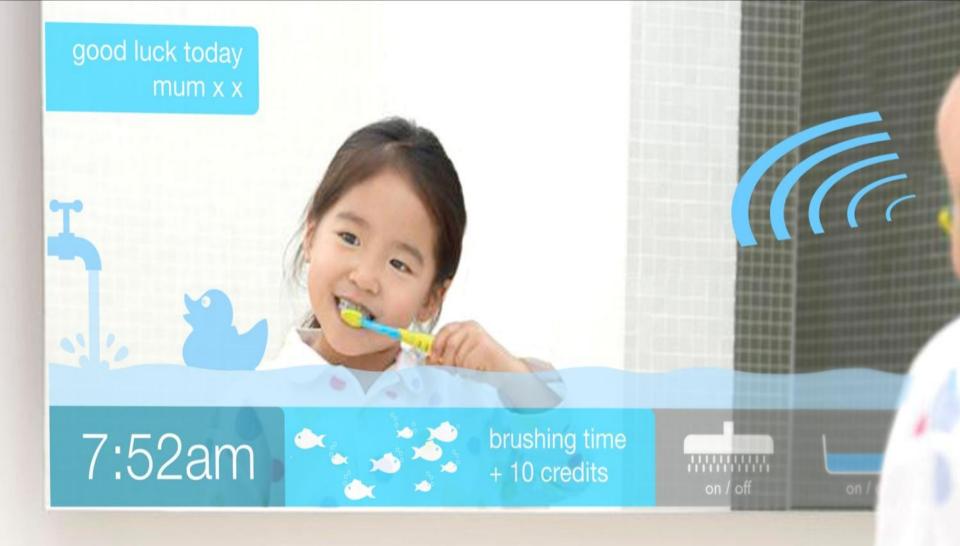
# **Battery Management**











# END-USER ENGAGEMENT



## **Thank You**



#### **ARM Info**

- Find out more about ARM by following these links:
  - ARM website: <a href="http://www.arm.com/">http://www.arm.com/</a>
  - ARM Connected Community®: <a href="http://www.arm.com/community/">http://www.arm.com/community/</a>
  - ARM Blogs: <a href="http://blogs.arm.com/">http://blogs.arm.com/</a>
  - ARMFlix on YouTube: <a href="http://www.youtube.com/armflix">http://www.youtube.com/armflix</a>
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