













# Aspects of Smart Grid













## The Philippines: Key Digital Statistical Indicators (Jan. 2017)



TOTAL POPULATION 103 Million URBANIZATION 44 %



INTERNET USERS 60 Million PENETRATION 58 % ACTIVE SOCIAL MEDIA USERS
60 Million
PENETRATION
58%



ACTIVE MOBILE USERS 54.0 Million PENETRATION 52%



MOBILE SUBSCRIPTIONS

129.4 Million % POPULATION 126%





# The Consumer in 2040

....Sorry, Bob, I checked that you still need to finish your RFP so there will be no television tonight.



ck.com - 654945241

Sorry, Bob. Your blood test showed that your cholesterol is too high. We only have cheese. Tonight you don't have access to the refrigerator.



Sorry, Bob. You started doing your laundry yesterday but you forgot to transfer the clothes to the dryer. Go down now and I'll connect you later.









## **Smart Grids for Consumer Empowerment and Energy Efficiency**

# Consumer Empowerment

**Summary Status:** Consumers have limited access to energy use and billing information. DUs and ECs usually provide billing statement and to a limited extent SMS.

#### **ISSUES**

#### **ENERGY USE**

**Delivery of consumption information** 

#### **BILLING AND PAYMENT**

Payment options

#### **RECOMMENDATIONS**

- Provide consumption information for all consumers regularly in various channels (thru email/SMS/web/instant messaging/social media)
  Budget alert/to what are the consumption limit Education campaign on managing energy use
- Provide the customers payment options, flexible payment scheme and an alternative payment mode of payment for energy use (postpaid/prepaid)



























## **Smart Grids for Consumer Empowerment and Energy Efficiency**

#### **ISSUES**

#### **BILLING AND PAYMENT**

Bill shock

 Challenges on meter reading (physical location, perception on accuracy, frequency of reading, etc.)

#### **REPAIR AND OUTAGE**

Outage detection and notification

#### RECOMMENDATIONS

Strengthen the pro-active process
 Implement the AMR/AMI to make available meter reading information to consumers

Provide alternative access to meter reading data

 Inform customers on cause of outage and estimated time of restoration, maximize technology to provide real information on actual repair (e.g. maps, photos/videos)



























## **Smart Grids for Consumer Empowerment and Energy Efficiency**

#### **ISSUES**

#### **ENERGY USE OPTIONS**

 Lack of awareness on smart grid applications, electricity consumption and conservation

#### **RECOMMENDATIONS**

- Conduct IEC campaigns on Smart Grid Roadmap
   Organize and capacitate consumer alliances for sharing of best practices
- Create an advisory council among stakeholders for proper representations in various fora Implement projects and practices back up by market research
- Develop and roll out specific energy modules for each target audience/stakeholders



























# Future Scenario









# THANK ME!

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