

# E N E R G O S

T e c h n o l o g i e s

- I am the Founder and Chief Business Analyst of Energos Technologies. This is my third venture as an entrepreneur, the first two being an Asset Management Company and second an IP Video Surveillance company.

- This is the first time I am raising money

- Energos develops Web 2.0 based tools and technology for Utilities, Industries, Commercial Buildings, Manufacturers of thermostats, smart measuring devices, wired & wireless sensors and controllers , Renewable energy companies, and Service Providers, to engage in interactive measures for energy efficiency, optimization and automation

October 7-9, 2008  
Cleantech Forum, Mumbai

**Rajesh Solanki**

# NEED..Businesses must run in Real Time

Role	Focus	Goal
<b>CEO</b>	<ul style="list-style-type: none"><li>• Grow the business</li><li>• Be lean</li></ul>	“Give me real time operational intelligence”
<b>CIO</b>	<ul style="list-style-type: none"><li>• Integrate the entire enterprise</li></ul>	Connect ERP to existing devices, sensors, facilities...with open IT standards.”
<b>CFO</b>	<ul style="list-style-type: none"><li>• Reduce Cost</li><li>• Avoid Change</li></ul>	Leverage our infrastructure. “Quick payback.”

**Adaptable - Configurable - Multi-Vendor**

We do this with our EIS(Energy Information Systems)

# PAIN...with Energy Information Systems

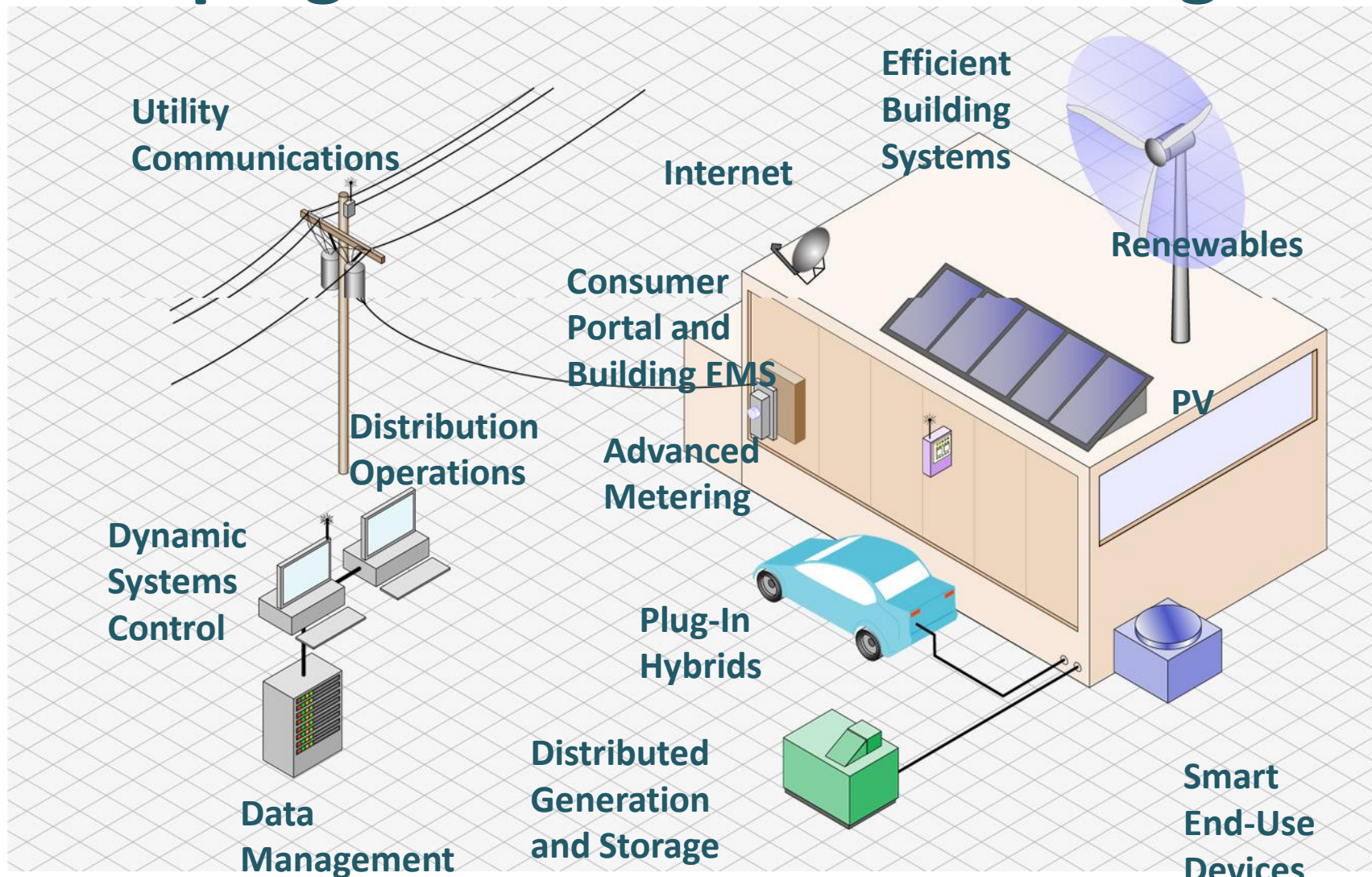
does any of this sound familiar?

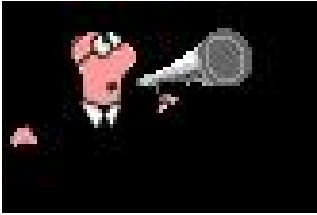
- Proprietary closed systems are the norm and installed base
- Utilities, End-users, Industrial and building owners held hostage by "incumbent" vendors
- Protocol/physical layer is not the problem, but the means to the problem -> control of end-user, de facto business model
- End-users do not have options to migrate
- The "new systems" (new and remove/replace) are just more of the old business model with new technology head end into a closed "front end"
- Market is technology starved by incumbents –IT surpassed EIS /EMCS/BAS years ago
- Energy information is —locked up and not available for outside consumption

# **SOLUTION..setting the goals**

- Normalize information at the source - **An Open Framework**
- Leverage the installed IP networks- **extension of the “edge”**
- Move EIS systems content and interaction to numerous users and consumers -**the “front end” is the Network and all that follows**
- **A Service Orientated Network Architecture within which all functions are well defined services with standard interfaces and defined sequences and process.**
- Design for openness and the ability to —“Google” future applications and service providers as they come.

# The New Grid & Its Role in Helping Us Meet These Challenges





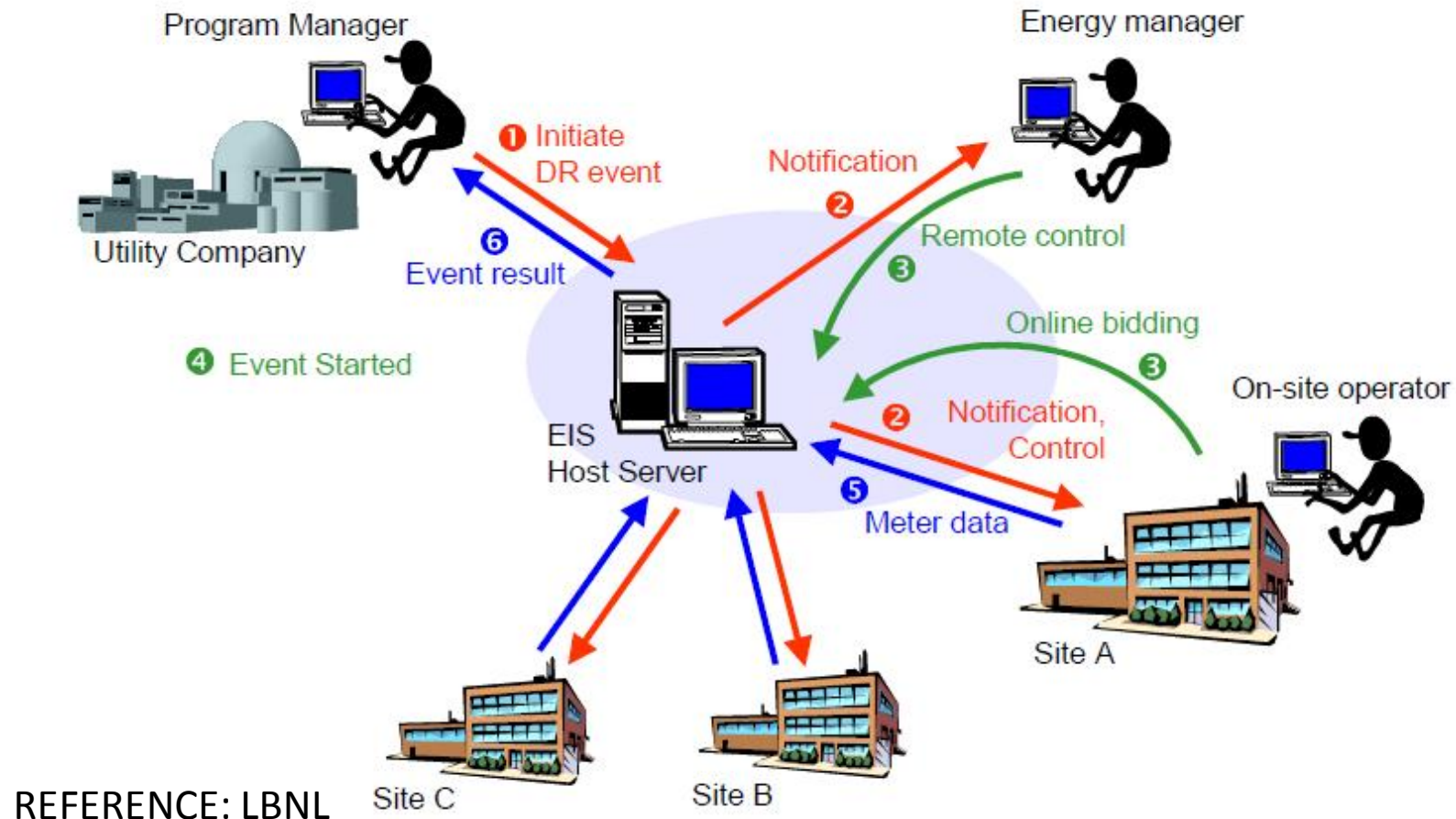
# Reset Expectations for Energy Management

## TOP 10

1. Cost-effective means of measuring their critical loads Understanding of Load Profile
2. Cost-effective means of monitoring liability
3. Identification of Demand Side savings
4. Automated Demand Response opportunities
5. Alarming and Exception reporting
6. Integration of desperate solutions with measured results
7. Information delivered in an actionable format
8. Open architecture for future considerations
9. Utilization of legacy systems, metering/ (BAS)
10. Common HMI for all facilities



# POWERMAN-MORE THAN AN EIS



ANALYTIC ALGORITHMS FOR PREDICTIVE AND DIAGNOSTIC MODELING

# POWERMAN.COM

- ONLINE PORTAL TO PROVIDE VALUE-ADDED SERVICES TO UTILITIES, COMMERCIAL & INDUSTRIAL SECTORS AND CONSUMERS
- PRECITVICE ANALYSIS AND FAULT DIAGNOSTIC MODELING
- WIDGETS AND MASH-UPS FOR DEVICES
- MANAGEMENT OF CARBON CREDITS AND TRADING

PRODUCT AT CONCEPT STAGE

# OUR CUSTOMERS



- **Major retail chain, Shoppers Stop, deploys Powerman across 25 stores, 5% saving in monthly energy bills within 3 months, with an ROI of 1 year**
- **Suzlon Pune, deploys Powerman EIS to measure efficiency of its production processes**
- **India's largest infrastructure company Larsen**

becomes a license partner of



SHOPPERS STOP

START SOMETHING NEW 





## Major Project Sales

- L & T Powai (0.25 Million USD, 300 measurement data points, 150 digital controls and PLC controls, energy quality)
- Shoppers Stop (0.25 Million USD, 25 outlets, 600 data points, HVAC and Lighting loads)

## Major License sales

- L & T (Purchase between April-August 2008- 0.08 Million USD, Suzlon, Glen Mark, SKF Bearings, Bill Care Pharma, FDC, Rolex Mills)
- Agreements signed with L & T for cooperation on EMCS/IBMS

SHOPPERS STOP

START SOMETHING NEW 

SKF

# Addressable Market...DR Opportunity in US

- U.S. Electricity  
Capacity: 757,000 MW
- Growth 19% next 10  
Years
- Demand Response 6%-  
11%  
Up to 20% In Some  
Cases
- Potential Value \$35b
- India Electricity  
Capacity: 135,000 MW
- Growth over 200% next  
10 Years
- Demand Response 6%-  
11% (assumption)  
Up to 20% In Some  
Cases
- Potential Value \$20b

# Addressable Market...Industrial and Commercial segments

	Electricity users in Industries ('000)	Electricity users in Commercial sector ('000)	CAGR (%)	Potential EIS user base in Industrial (10%)	Potential EIS user base in commercial, 10%	Potential Market size in industrial, USD Billion	Potential Market size in commercial, USD Billion
USA & Canada	973	16820	1.9	105	1817	0.21	3.63
India	2790	11247	1.9	301	1215	0.60	2.43
China	3688	19710	1.9	398	2129	0.80	4.26
World	28024	101236	1.9	3027	10933	6.05	21.87

Assumption: Average value of each sales is taken at USD 1000-3500

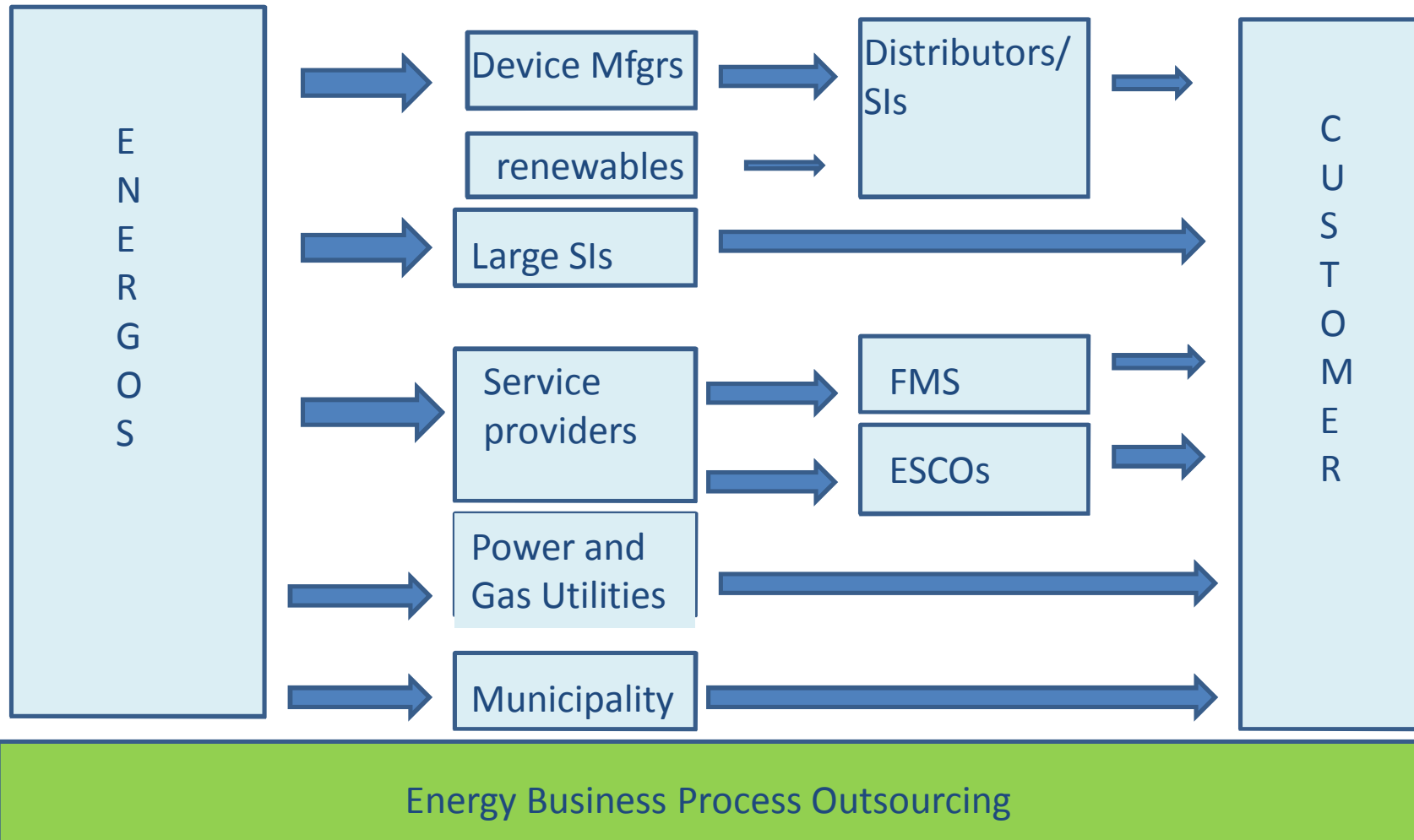
Source: Frost and Sullivan Report

# INDIAN PERSPECTIVE...Market Opportunities in Energy Sector

- Fast growing wind and solar industries
- Technical solutions for reducing energy costs for companies
- Supplying technology to the biomass, biogas and waste sector
- Increasing degree of privatization in the electricity sector opens up the possibility for consultative deployments of AMR/AMI and DR systems
- The poor conditions of the existing power plants show a general demand for changes and improvements of equipments and plants.
- Great transmission costs signal a demand for modern cables in the electricity sector
- High growth rates imply increasing CO<sub>2</sub>-emissions, which lead to a greater demand for energy efficient technologies such as clean coal technologies.
- India shows great potential in carbon trading, which leads to a demand for new technologies
- Greater political emphasis on cooperation between the public and the private sector through partnerships opens up for great financing possibilities
- The establishment of a national gas grid opens up for opportunities in the field of supplying equipment, systems and plants
- Political actions are taken to implement energy labelling on energy intensive products

# OUR BUSINESS MODEL

Online Portal and customer enhanced open framework



# COMPETITIVE SCENARIO



GRIDPOINT



ENERNOC  
ENERNOC



OSI  
*opening your world*



TRIDIUM  
Connecting minds and machines

FAT SPANIEL  
TECHNOLOGIE  
S



Powerit Solutions™  
A Powerit Holdings Company



SILVERSPRING  
NETWORKS



Verdiem®

# COMPETITIVE ADVANTAGE

- End-to-end technology from consumer portal to last mile measurement, control and interactive transactions
- Ever Expanding Framework will communicate with measurement, sensing and control devices across a spectrum of industries like Metering, Electrical, Refrigeration, HVAC, Lighting, Renewables , Building Automation, Industrial automation, Home automation Security and others
- Highly Scalable Applications for varied applications and end user industries
- Alliances with Device manufacturers, ERP and CRM vendors, yet hardware neutral and open framework based, giving utilities wider freedom to choose hardware and integrate legacy products
- Special focus on Tailored products for High energy consuming industries, Renewables, and carbon emissions management
- Brand positioning around consumer services and online community building

# MANAGEMENT TEAM

- **Founder Director and Business Analyst** : Rajesh Solanki, 41, BE (MS University, Baroda), MBA (Bombay University), first generation entrepreneur, founded Rasan Infocom P Ltd., which provides IP Video Surveillance software and hardware solutions. He brings the technology, industry and market knowledge in energy and controls. He is responsible for the strategic direction of the company.
- **Founder Director and Systems Analyst** : Helmut Otto, 55, ex-Siemens UK, DTW- Germany, first generation entrepreneur, started Uffizio in Berlin with software arm in Mumbai, present in India since 9 years. His 30 years experience in software makes him an excellent Software Systems Analyst. He specializes in web based enterprise applications.
- We are looking for a CEO with Industry knowledge and the pedigree to scale up start-ups. Building a stronger business development team will be one of the things to work out closely with the investors we will work with.

# FINANCIAL PROJECTIONS

	2008-09	2009-10	2010-11	2011-12	2012-13
Revenue	1	5	13	36	63
Operating Expenses					
Direct Cost of goods	1	1	3	4	5
Cost of Sales	1	2	4	6	9
EBITDA	-1	2	6	26	48
EBITDA Margins %	-47	32	49	72	77

## SALES GOALS

**Year 1- Achieve revenue of 1 Million USD**

**Year 2-Achieve revenue of 5 Million USD**

**Year 3-Achieve revenue of 13 Million USD**

**Year 4-Achieve revenue of 36 Million USD**

**Year 5-Achieve revenue of 63 Million USD**

**BREAKEVEN IN THIRD YEAR**

# CAPITAL

**In Round A, we plan to raise 3 Million USD now, which will be used for,**

- Product development
- Market Development
- Infrastructure, team building
- **In Round B, we plan to raise another 3-6 Million in 2-3 years**

## **EXIT STRATEGY**

Most Preferred exit strategy will be Acquisition by a large player in Energy  
Interested companies may be Siemens, GE Energy, IBM, Itron (zigbee), ABB, Areva, Elster, etc.