



Implementation of Thailand Smart Grid Policy Plan and Roadmaps

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Outlines

- **Thailand Policy**
- **Utilities' Roadmaps**
- **Mae Hong Son pilot project**
- **Q & A**

National Policy Maker

- Master Plan (Policy Plan) development
- Supporting policy for Smart Grid development

Regulator

- Regulatory framework
- Implementation guidelines and standardization

Utility

- Smart Grid development in each utility in line with the national master plan and regulatory framework

Vendor

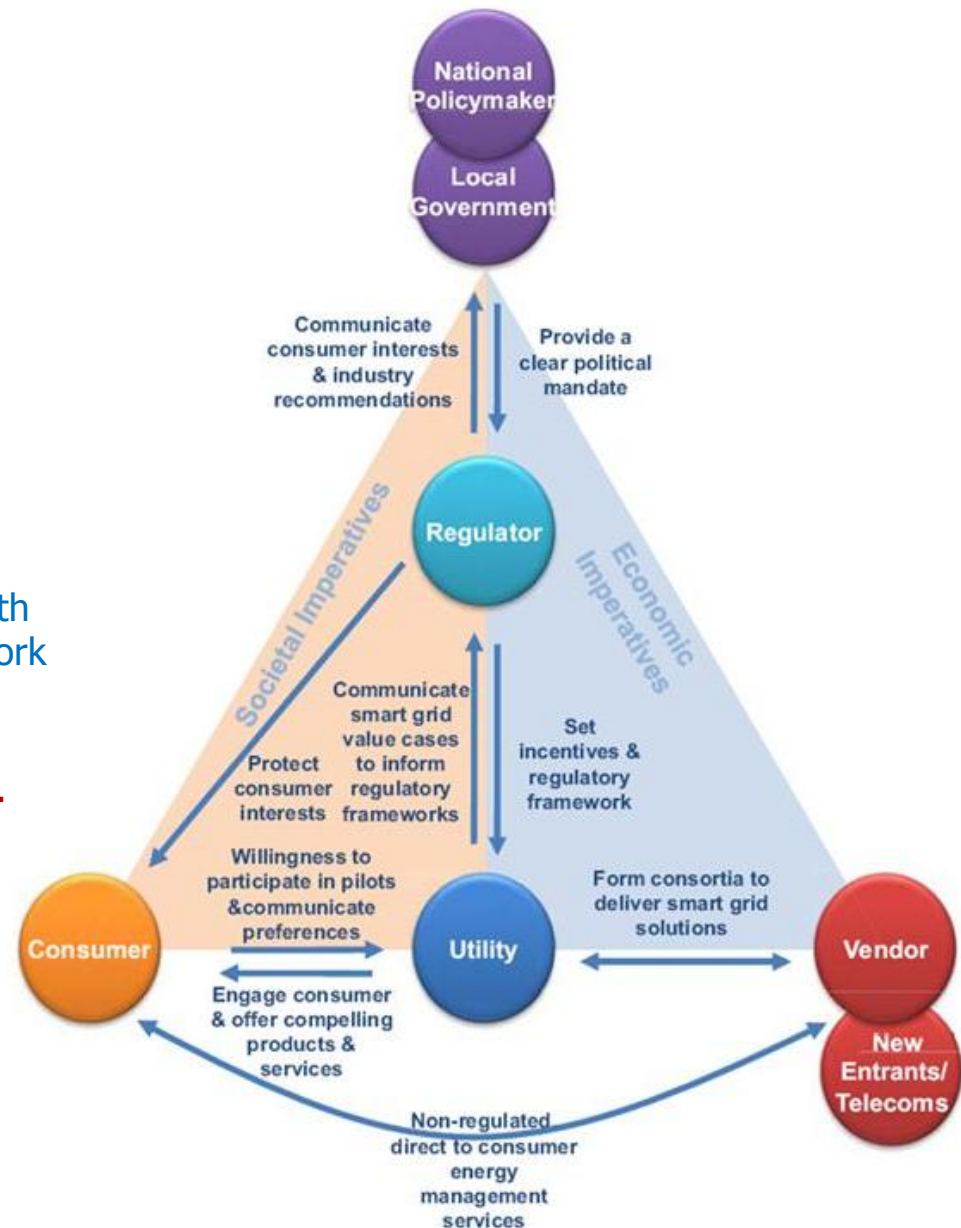
- Solution providers: EMS, integration service, etc.

Academics /NGO

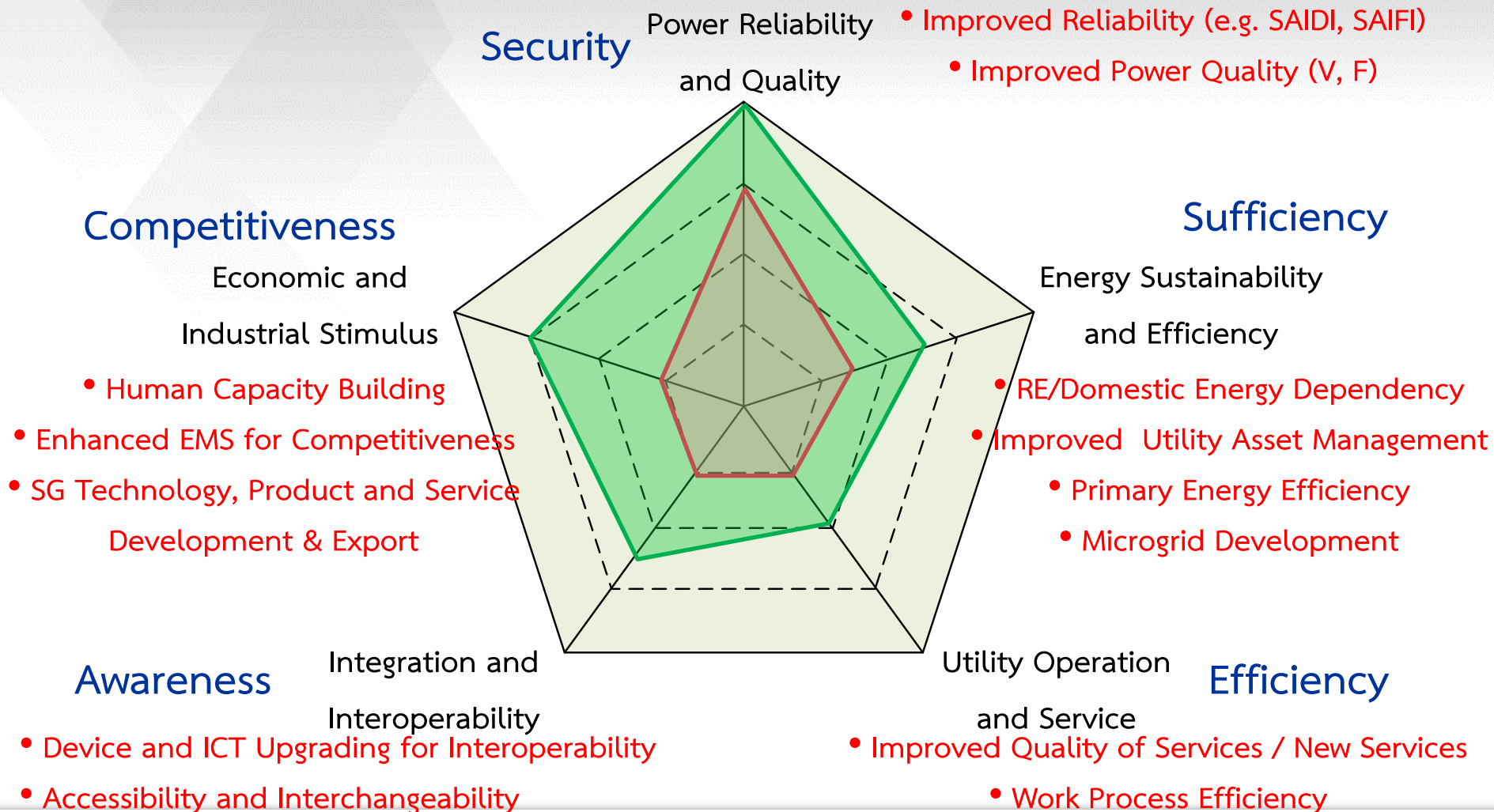
- RD & D collaboration
- Stakeholders' awareness

Consumer

- Getting involved, active demand response



Strategies & Objectives



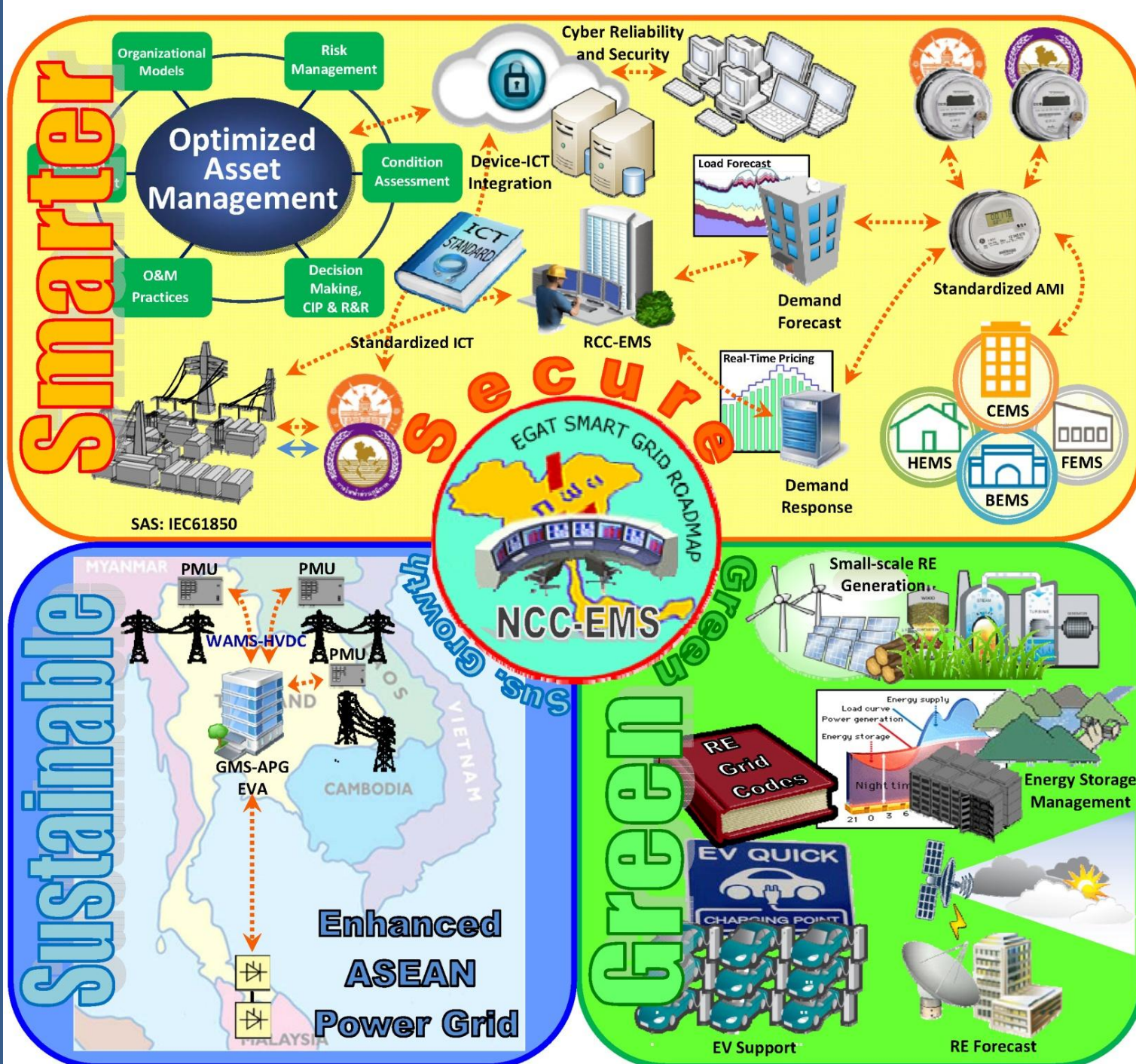
EGAT

SMART
GRID

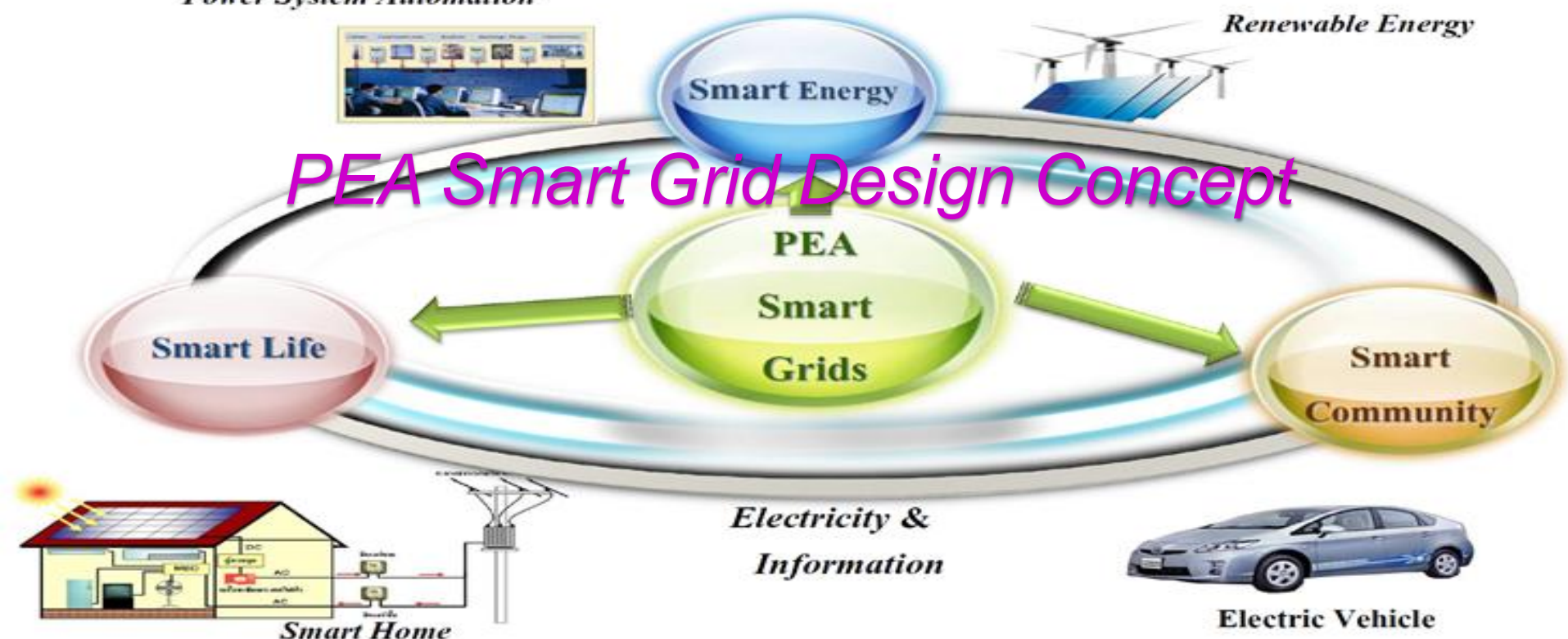
[SG]²

3
DOMAINS

17
INITIATIVES



PEA Smart Grid Design Concept



Smart Energy

Smart Community

Smart Life

Smart Generation

- DG Integration
- Energy Storage
- Micro Grid
- Virtual Power Plant

Smart Network

- Integrated Active Distribution Management
- Substation Automation
- Advanced Asset Management
- Mobile Workforce Management

Smart Infrastructure

- Public Charging Stations
- Intelligent Street Lighting
- Bundled Services

Smart Customer

- AMI
- Smart Buildings
- Smart Appliance
- On-site Generation
- Home Charging Stations

Smart Service

- E-Office
- Green Office
- Energy Management

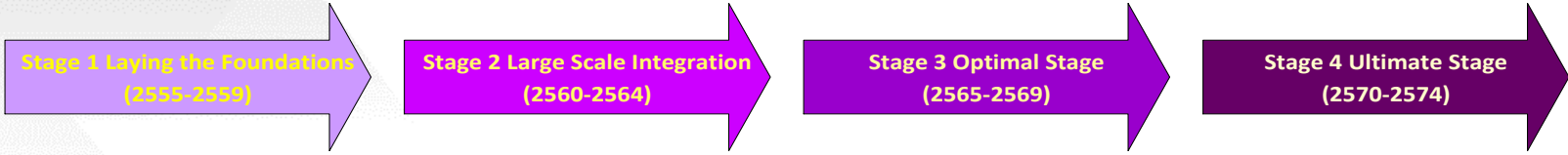


PEA Smart Grid Roadmap



Start

Finish



Smart Energy

Pilot Projects <ul style="list-style-type: none">Substation AutomationMicro GridsDistributed Generation	<ul style="list-style-type: none">Optimized Asset ManagementOptimized Mobile WorkforceFully Substation Automation	<ul style="list-style-type: none">Large Scale RenewablesUrban Smart Micro Grids	<ul style="list-style-type: none">Self Healing GridFull AutomationPervasive Cyber Security
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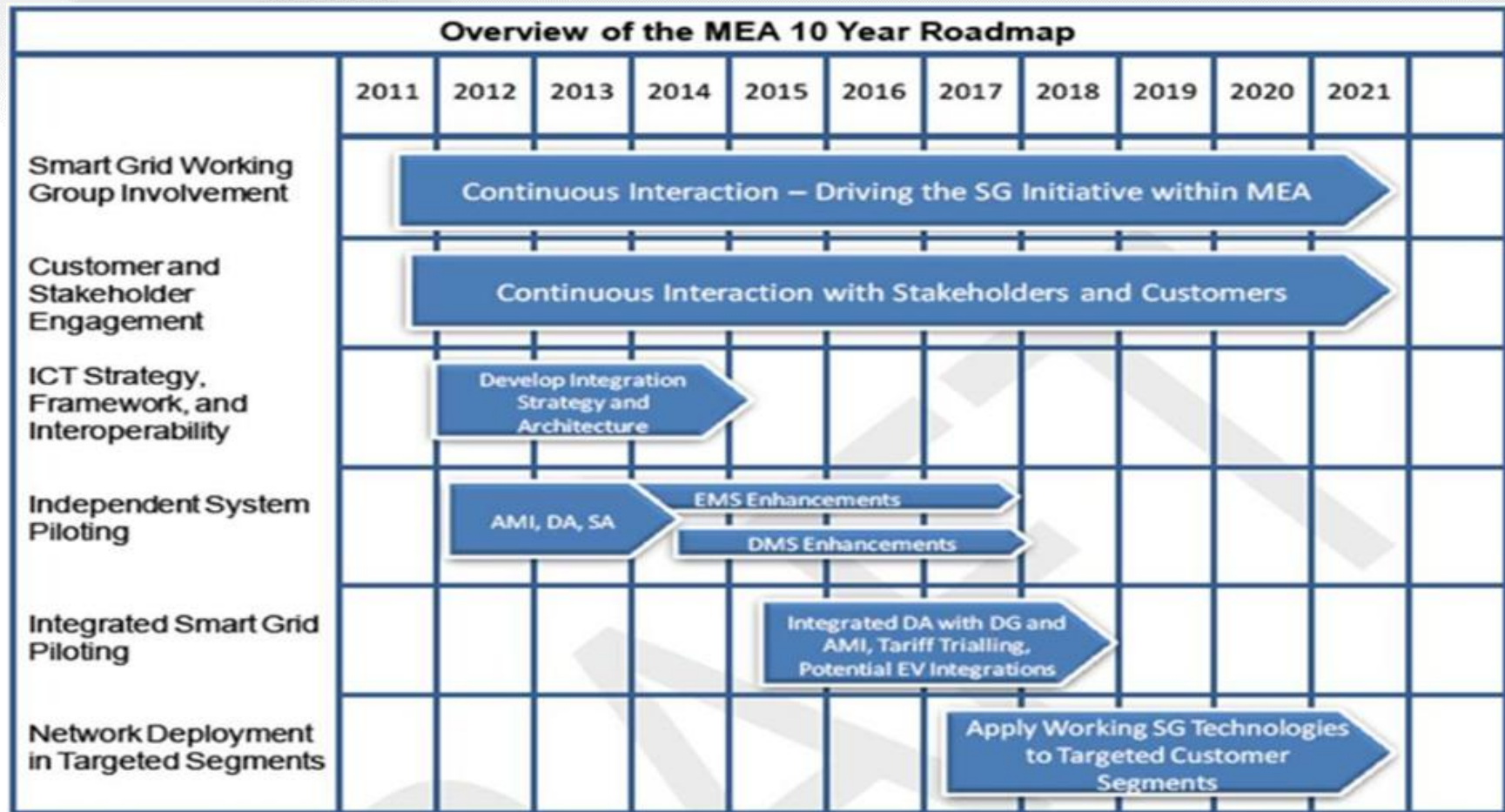
Smart Life

Pilot Projects <ul style="list-style-type: none">Advanced Metering InfrastructureEnergy Storage	<ul style="list-style-type: none">Real-time PricingSelf GenerationDemand Reduction	<ul style="list-style-type: none">Wide Spread RenewablesIntelligent BuildingsSmart Appliances	<ul style="list-style-type: none">Full Customer ChoiceCompetitive MarketDemand Side Management
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Smart Community

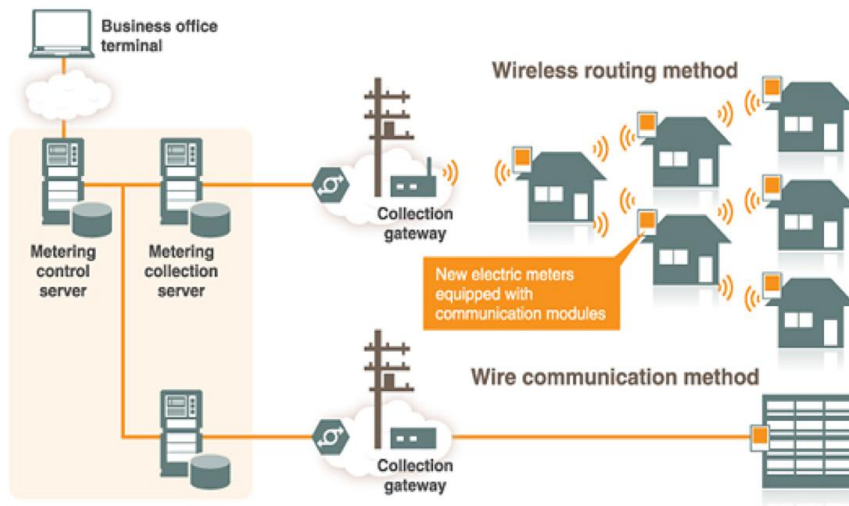
Pilot Projects <ul style="list-style-type: none">Electric VehiclesIntelligent Street-lights	<ul style="list-style-type: none">Development of RenewablesHybrids and Full EV's	<ul style="list-style-type: none">Optimized Charging Infrastructure	<ul style="list-style-type: none">Electric Vehicles as a distributed resource (V2G VPP)
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MEA Smart Grid Roadmap



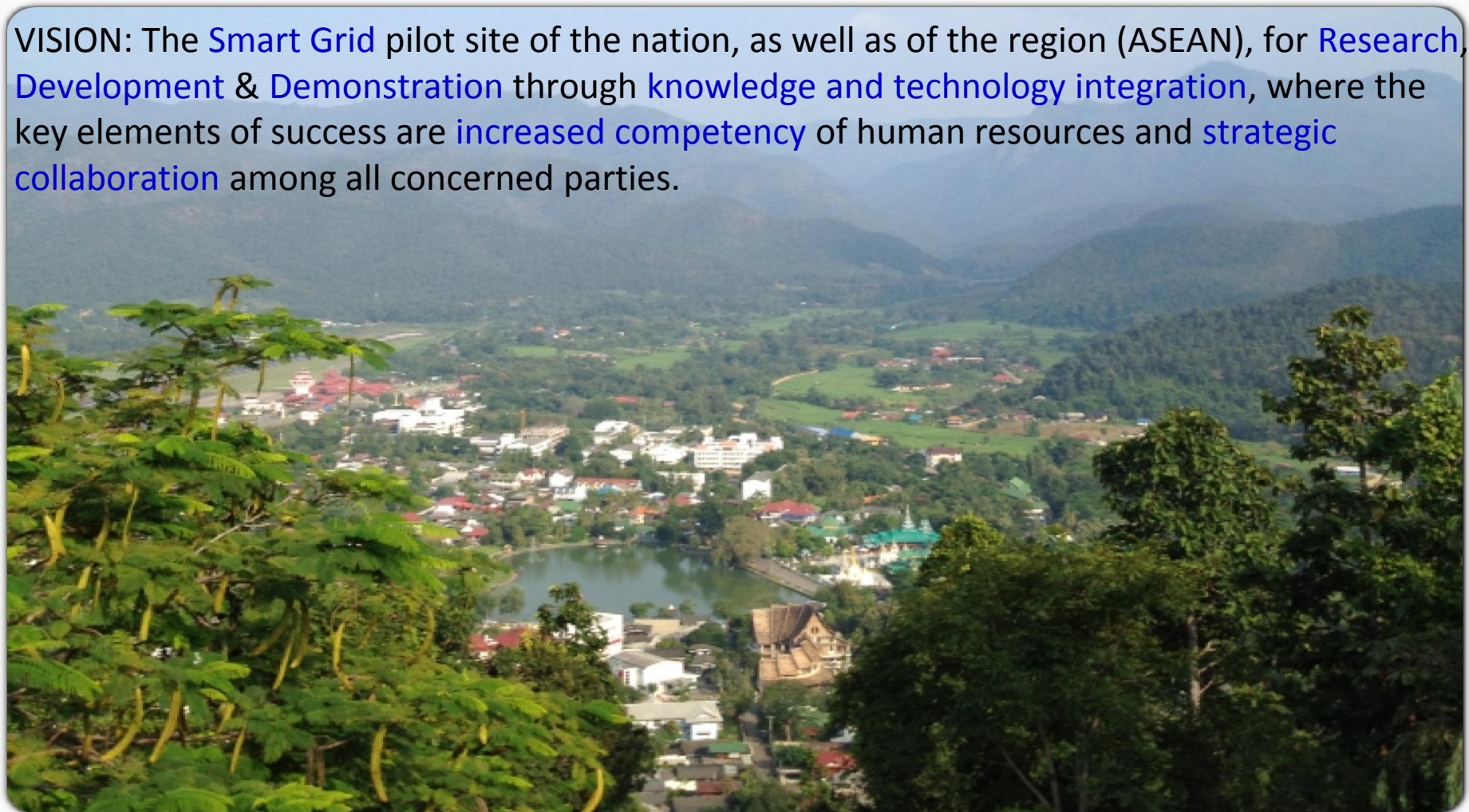
MEA Smart Grid Roadmap: Focus

- SAS/DAS, SCADA-DMS
- Smart Meters @large customers for EMS
- EV-related business development and technical impacts; with 10 charging stations planned

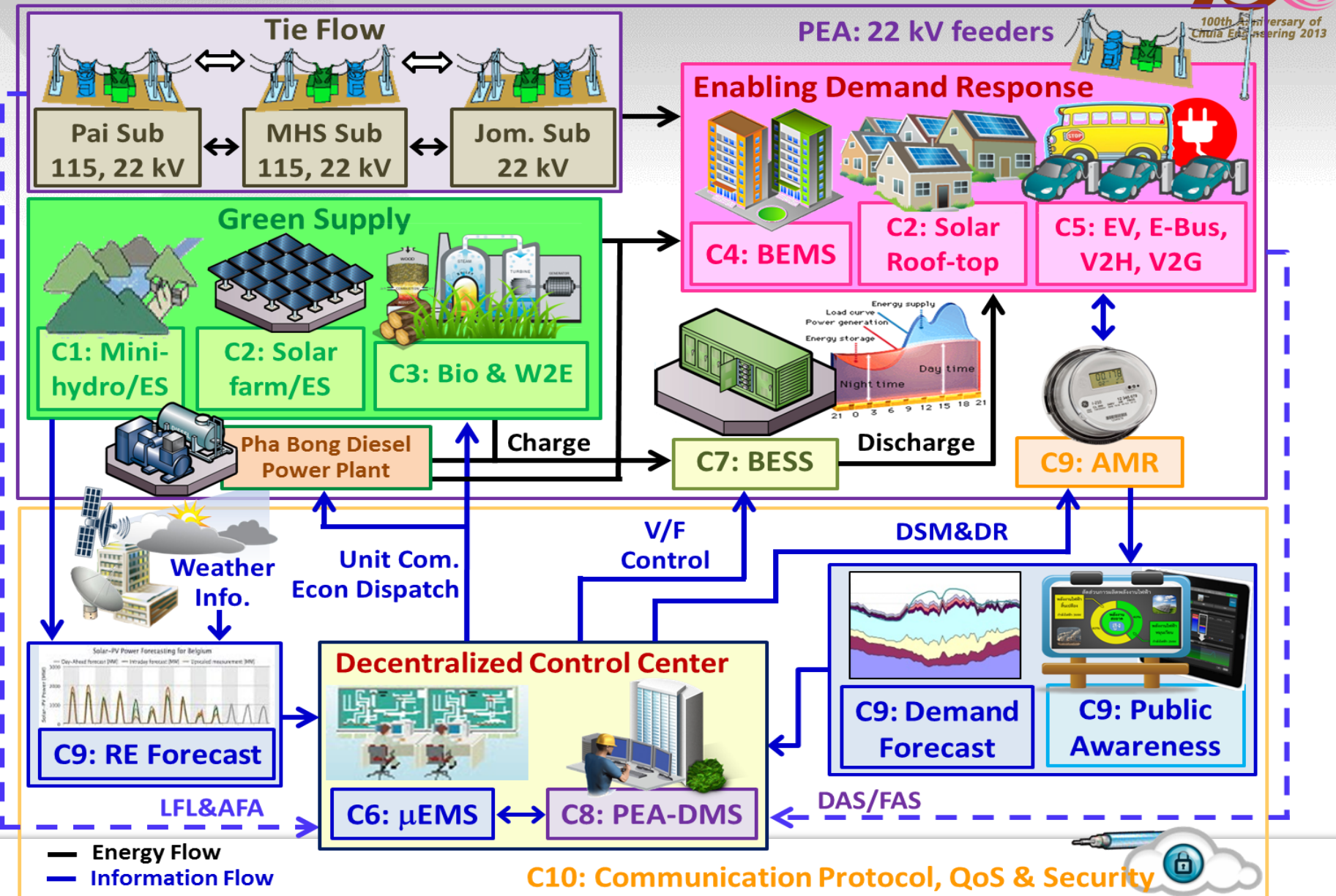


MHS Smart Grid National Pilot Project

VISION: The Smart Grid pilot site of the nation, as well as of the region (ASEAN), for Research, Development & Demonstration through knowledge and technology integration, where the key elements of success are increased competency of human resources and strategic collaboration among all concerned parties.



MHS Smart Grid National Pilot Project



Q & A

Thank you for your kind attention.