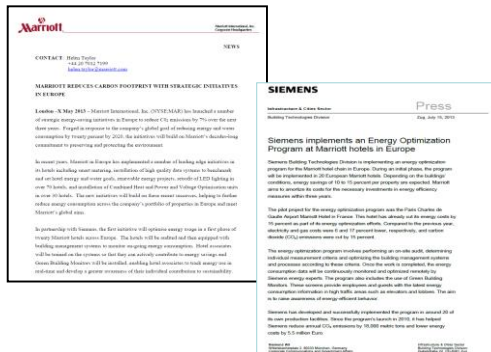


Lighting Up Your Imagination





Strong existing relationship & cooperation

Mutual commercial opportunities:

- Marriott to reduce their energy consumption and CO2 footprint (reduce costs)
- Siemens to grow their business and revenue

Need to evolve the approach to energy and sustainability

Strategy and Planning

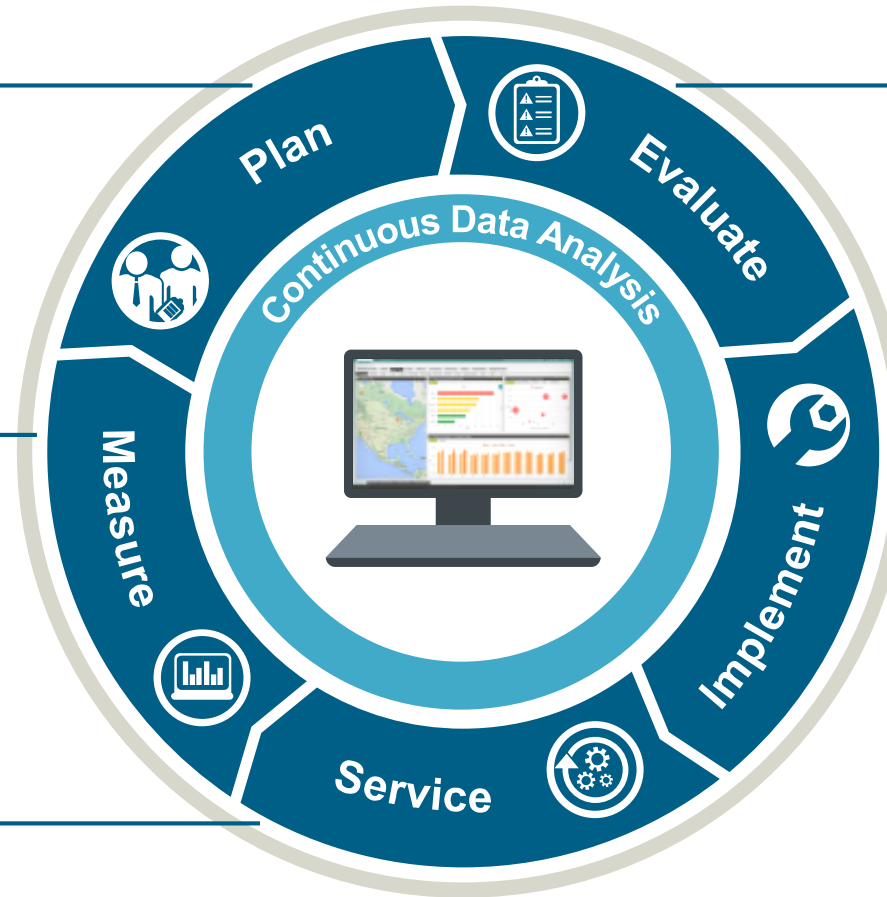
- Energy efficiency directive advisory services
- Sustainable energy strategy
- Greenhouse gas reduction strategies

Measurement and Reporting

- Data monitoring, archiving and reporting
- Measurement and verification/performance assurance
- Budgeting and forecasting

Service and Optimization

- Building performance optimization
- Utility bill management
- Commodity risk management



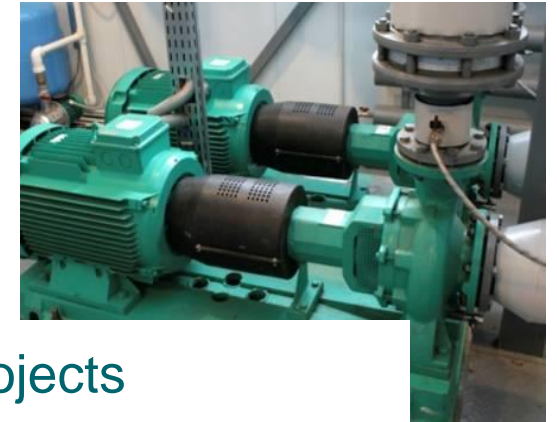
Evaluation and Assessment

- Preliminary energy and water audit
- Detailed energy and water audit
- Energy supply analysis

Program Implementation

- Facility improvement measures
 - Building automation
 - Mechanical
 - Lighting, electrical
 - Compressed air
 - Heat recovery
 - VFDs
 - Laboratory
 - Low cost/no cost Measures
 - Commissioning
- Financing solution (Energy saving performance contracting)
- ISO 50001 implementation

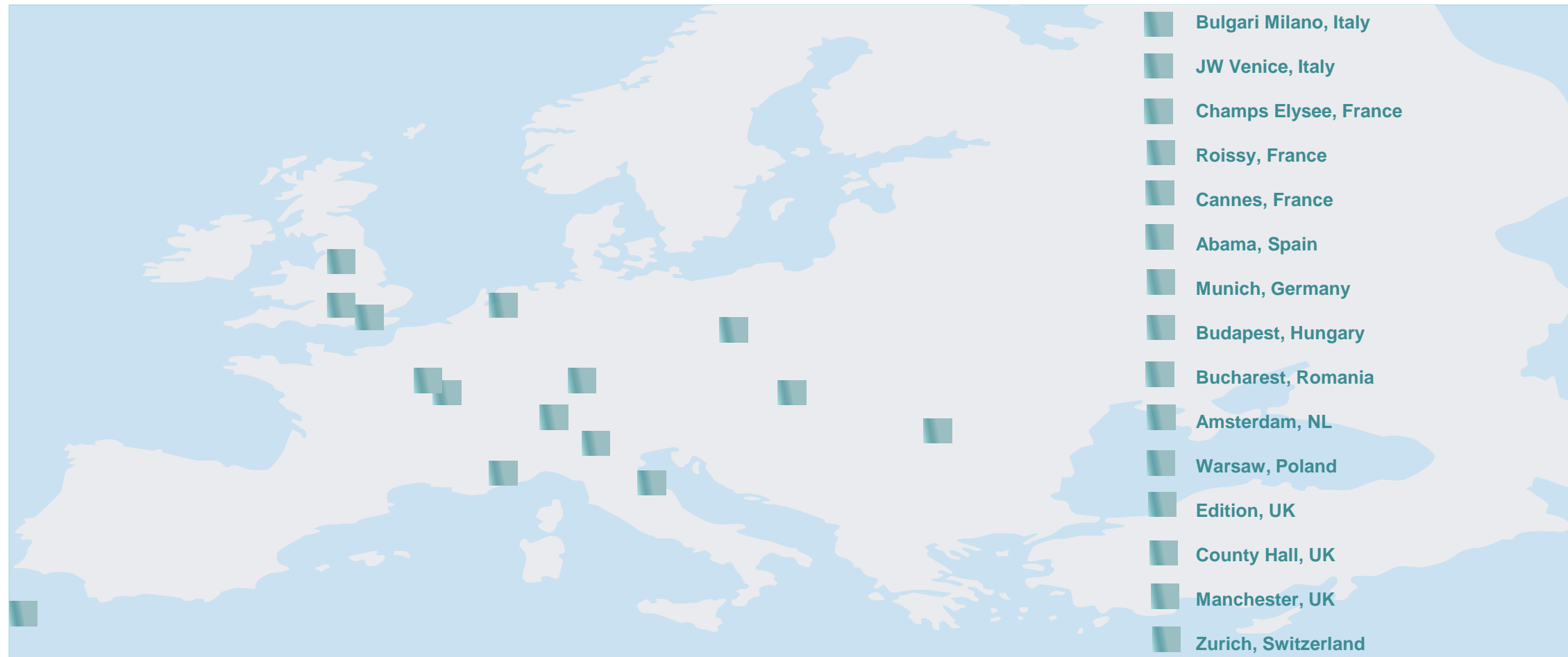
- Building automation & controls
- Lighting retrofits & controls
- Compressed air (leak detection & repair)
- Utility tariff rate optimization
- Heating, ventilation & air conditioning (HVAC)
- Retro-commissioning
- Boiler replacement & system improvements
- Pumps, fans, motors & drives
- Cogeneration (onsite generation of electricity)
- Demand Flow



- ✓ Turn key projects
- ✓ Multidisciplinary measures
- ✓ Financing

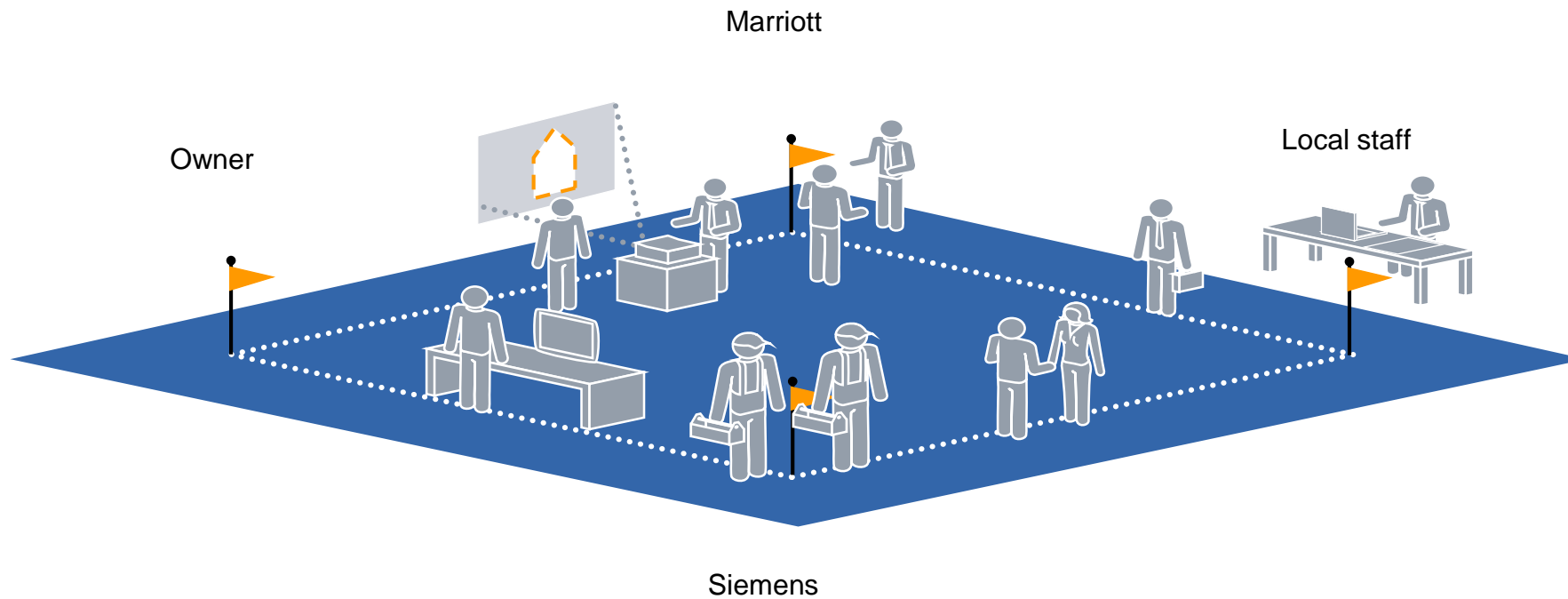


Marriott in Europe – example of targeted Hotels





Four pillars needs to be synchronized



Large number of Hotels in many different countries

Challenges Marriott
Resources
Funding
Engagement

Challenges Siemens
Different needs
People /cultures
Time of implementation



How we have overcome these Challenges

- Framework agreement and top down approach as well as support
- Clear communication
- Engagement – from all participants, Hotels; Siemens in Country; Owners
- Funding models





Progress and update

- Frame agreement valid and ongoing
- Regular update meetings to review the progress
- 1 and 2nd phases of hotels done and analysed → Selection of top opportunities and hotels
- EU EED Audits and support done
- FIMS (Facility Improvement Measures) identified
- Projects and services executed and implemented



Marriott Zurich Switzerland



Project Example

Siemens solution

- Remote monitoring and Building Performance Optimization of the hotel and its main energy consumers

Investment

€25 k

Savings

€30k/year

Pay back period

0.9 years

Hotel Roissy
Paris Charles de Gaulle



Project Example

Siemens solution

- Re-commissioning of the heat recovery system in 4 of the main AHUs.
- Demand control ventilation with CO2 sensors, variable speed on fans.
- Optimised control of the AHU operation with upgraded digital controls

Investment

€85 k

Savings

€33 k/year

Pay back period

2.6 years



Next steps

- Roll out to additional hotels in Europe in 2017/2018
- Include Starwood in the program
- Increase the awareness and motivation of the owners of the hotels
- Speed up the work and boost the results
- Leverage the support of Siemens Financial Services to finance projects where applicable
- Extend and add new data driven services and offering from Siemens
- Roll out Globally – success stories e.g. in India already implemented