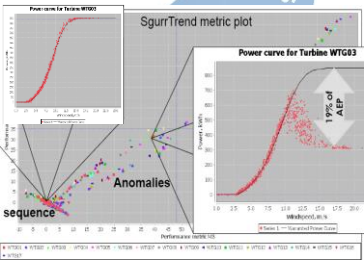
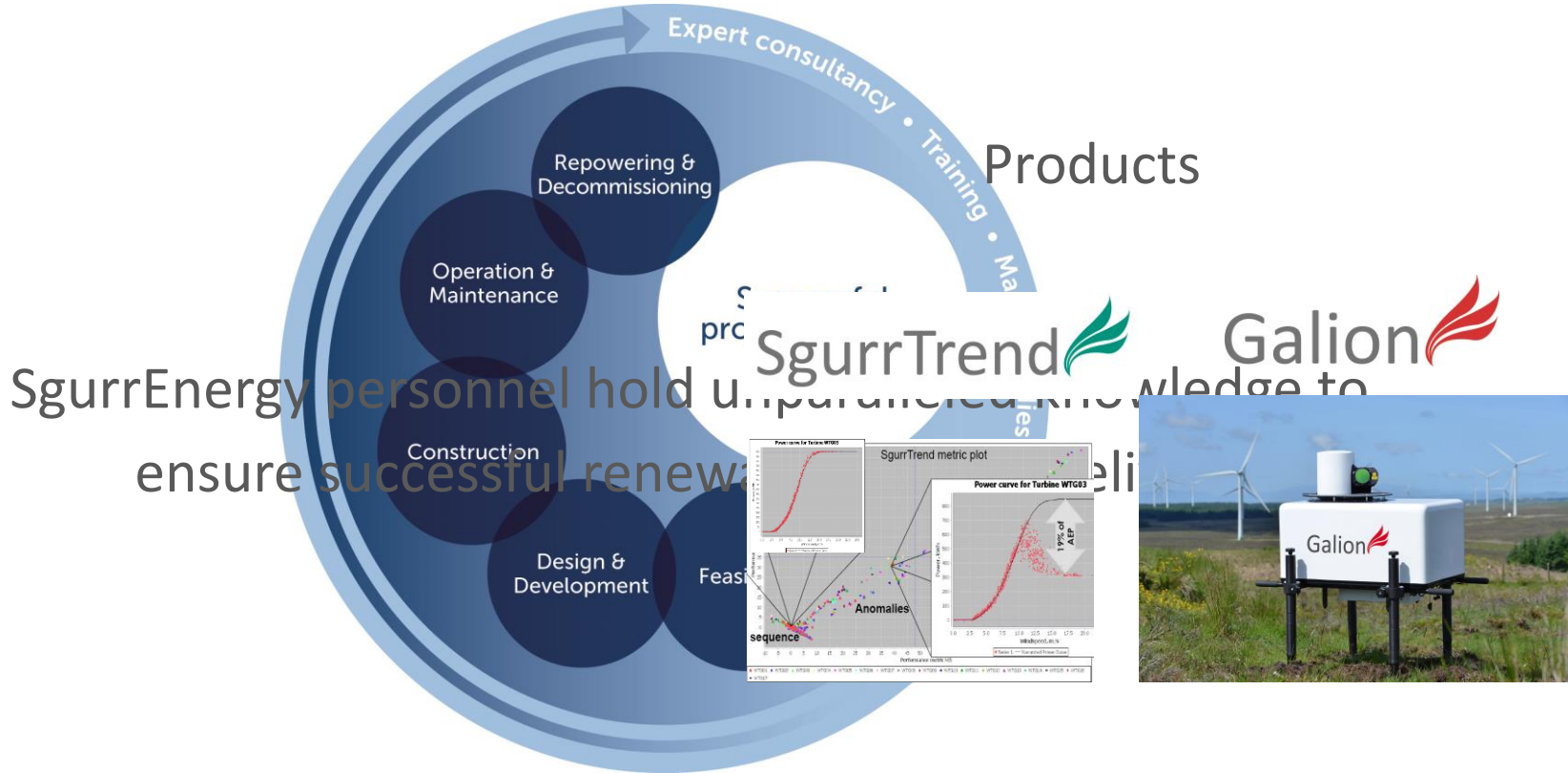




ASLEE  
Setting the Scene  
Fergus Tickell  
20<sup>th</sup> March 2017

# What do we do?



Wind

Offshore Wind

Wave & tidal

Solar

Bio-energy

Hydro



# Renewable Energy Potential



- West coast of Scotland have some of the best potential for renewables in Europe
  - 36.5GW onshore wind
  - 7.5GW tidal (25% of Europe's potential)
  - 14GW wave (10% of Europe's potential)
  - Numerous small scale hydro opportunities
  - Bioenergy projects
- Renewable energy projects can revitalise local communities
  - Isle of Gigha
  - Assynt
  - Isle of Muck



# Grid Constraints



## Constraint status filter

- Unconstrained
- Constrained

Filter ▼

Reset ↻

## Legend



Grid Supply Points



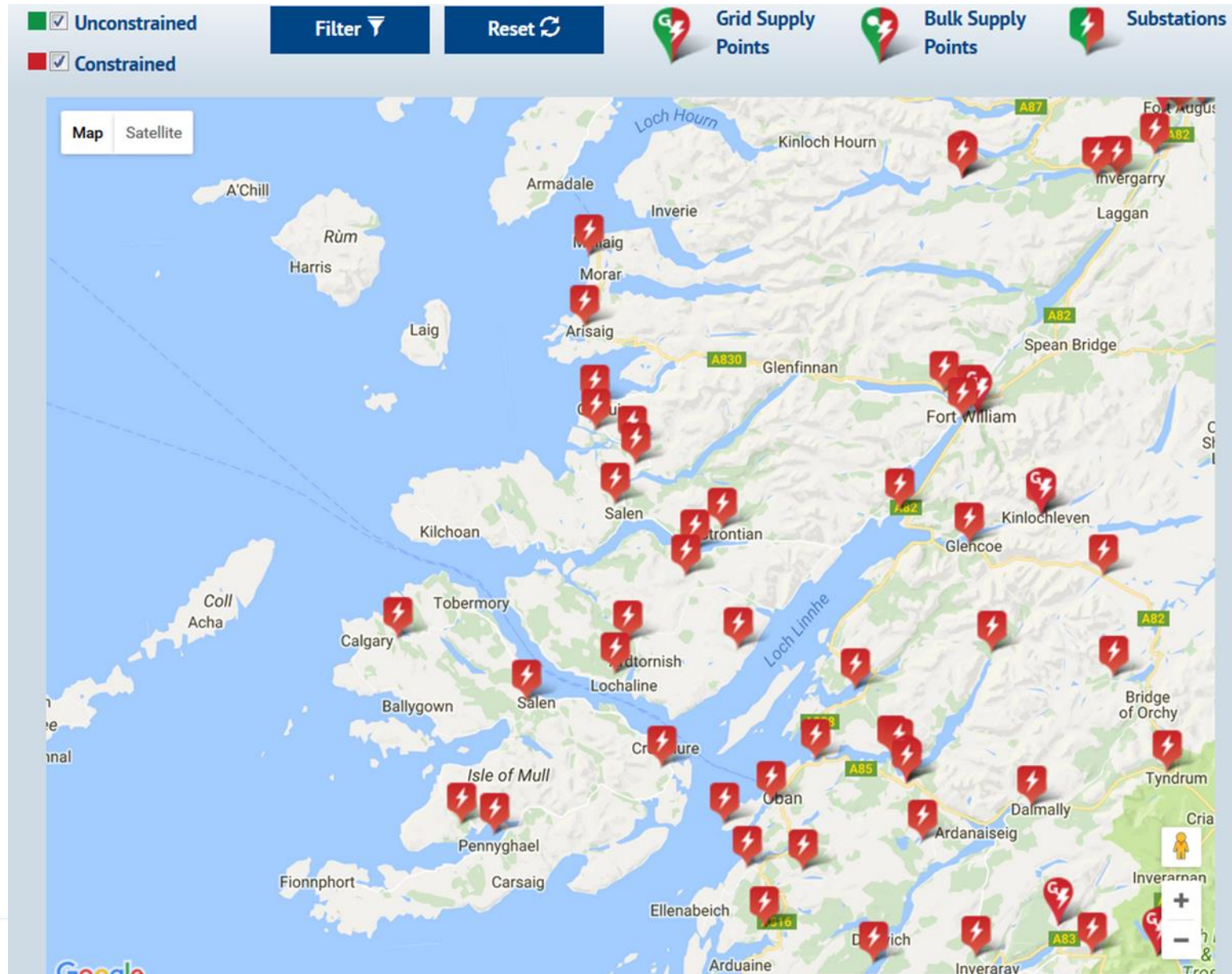
Bulk Supply Points



Substations



# Grid Constraints



# Case Study 1: Isle of Rum



- Island with fragile population (28)
- Not linked to the national grid
- Private wire to island properties
- 30kw & 15kw hydro generators
- Annual electricity consumption of 110,000 kWh
- Potential generation of 290,000 kWh



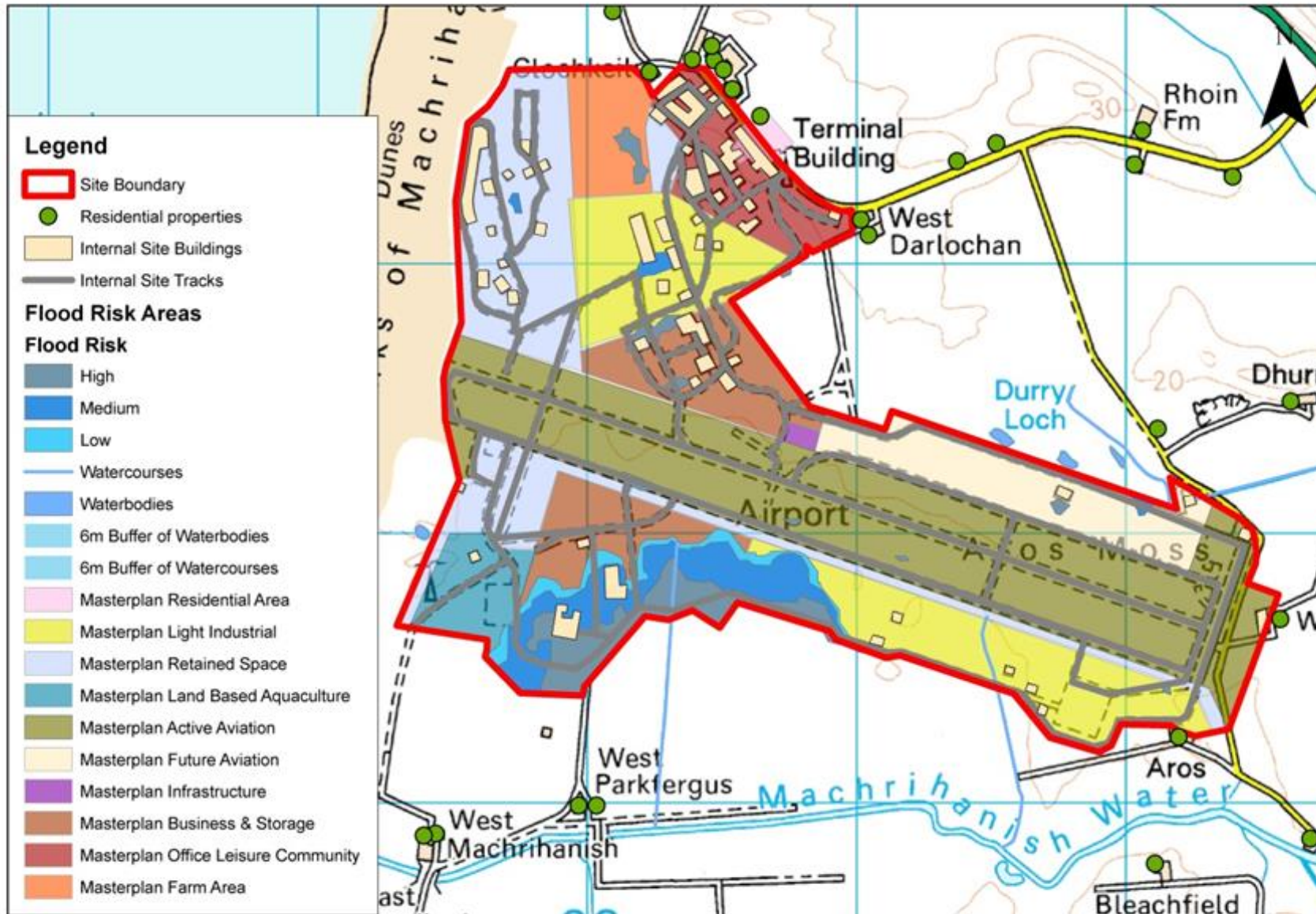
# Case Study 2: MACC



- Machrihanish Airbase acquired by the community in 2012
- 1000 acres of land suitable for development
- Strategic Masterplan Area and as a Strategic Industrial Business Location with emphasis on renewables



# MACC Business Park Masterplan





# Case Study 2: MACC



- Potential for over 20MW of solar photovoltaic capacity
- 50kw grid connection constraint until 2021
- Insufficient on-site demand to justify maximising renewable potential.
- Synergies with on shore aquaculture
- Co-located with MERL



