# Lessons Learnt : Experiences in other Sectors
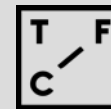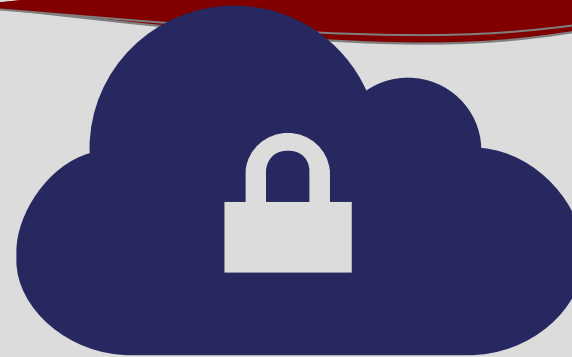
Dr. Steven Davy

# Overview

- Approach to use of Big Data in different Sectors
- Experiences from Transport
- Experiences from Energy
- Experiences from Disaster
- Lessons Learned

# Experiences in Transport

- eDrive – MySafeDrive Project
- Drives Opt-in to be monitored
- Potential Savings in Insurance Costs
- Big Data Problems
- Privacy Concern
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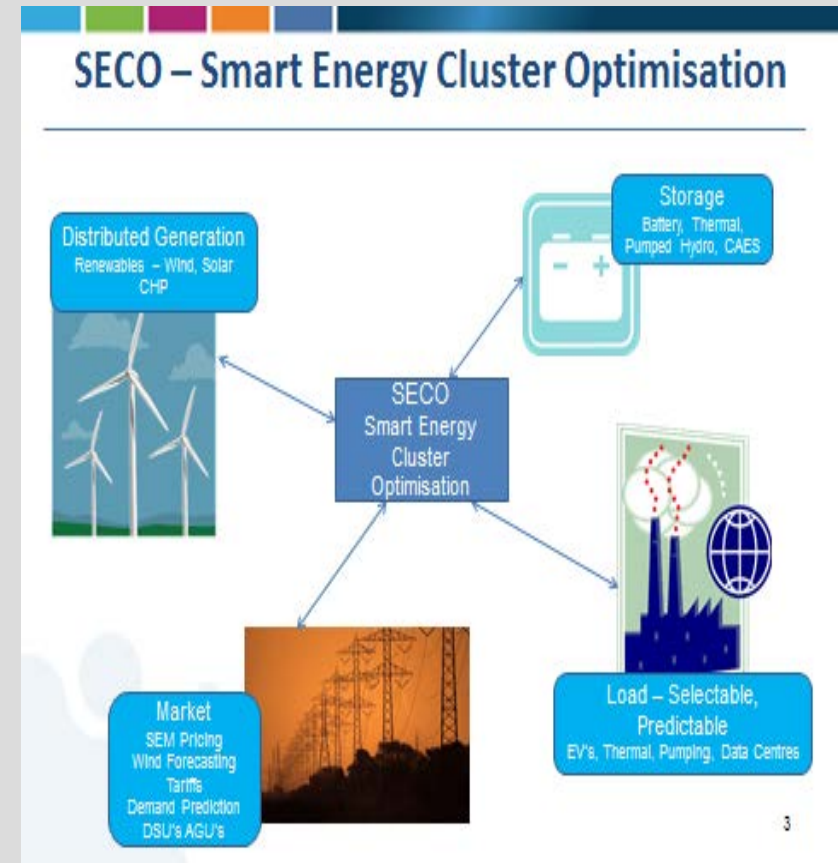- Lesson: User is in control of their Data

# Experiences in Energy

- Energy usage in the enterprise is tracked
- Optimizations are suggested based on flexible load.
- Data Gathered across enterprises.
  - ▪
  - ▪



SECO – Smart Energy Cluster Optimisation

Distributed Generation
Renewables – Wind, Solar
CHP

Storage
Battery, Thermal,
Pumped Hydro, CAES

SECO
Smart Energy
Cluster
Optimisation

Load – Selectable,
Predictable
EV's, Thermal, Pumping, Data Centres

Market
SEM Pricing
Wind Forecasting
Tariffs
Demand Prediction
DSU's AGU's

3

# Experiences in Energy

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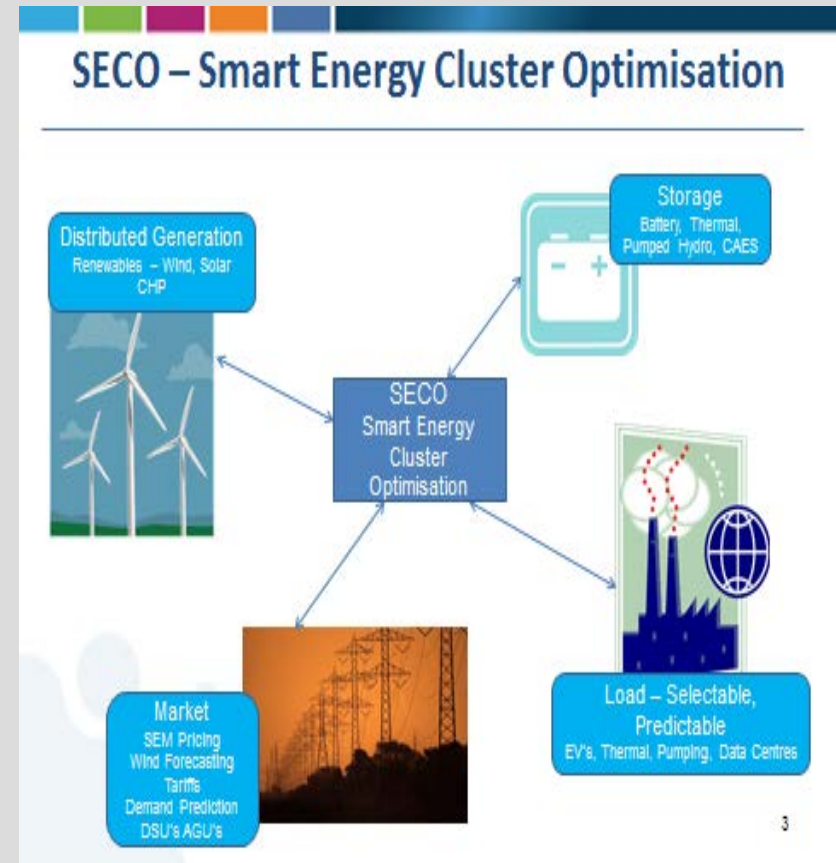- Data Gathered across enterprises.
- Lesson: Solutions Must Adapt to various data forms
-



## SECO – Smart Energy Cluster Optimisation

**Distributed Generation**
Renewables – Wind, Solar
CHP

**Storage**
Battery, Thermal,
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**SECO**
Smart Energy
Cluster
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**Load – Selectable, Predictable**
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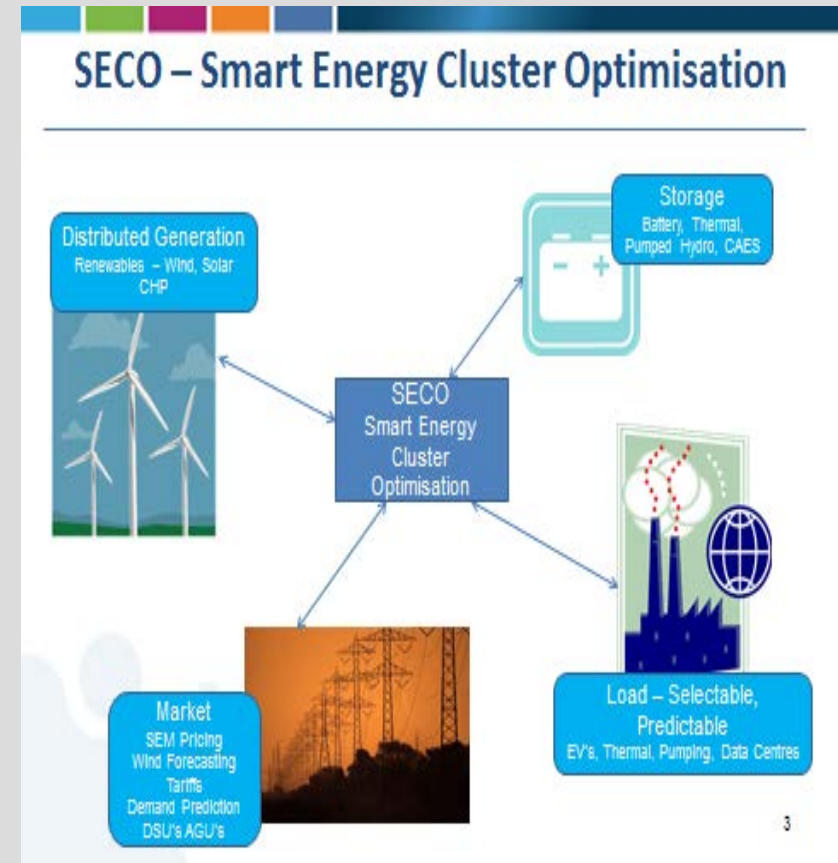- Lesson: Solutions Must Adapt to various data forms
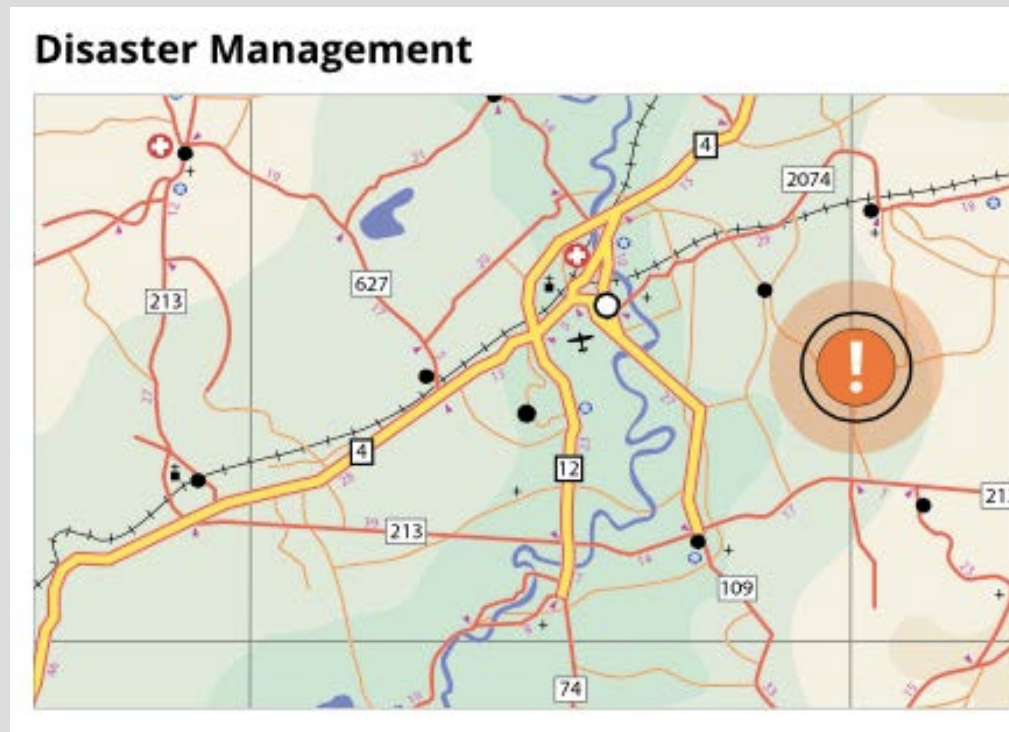- Lesson: Commercial Data MUST be secured.



SECO – Smart Energy Cluster Optimisation

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# Experiences in Disaster Zones

- First Responders first assess the situation
- Large volumes of Big Data need to be processed
- Varying accuracy
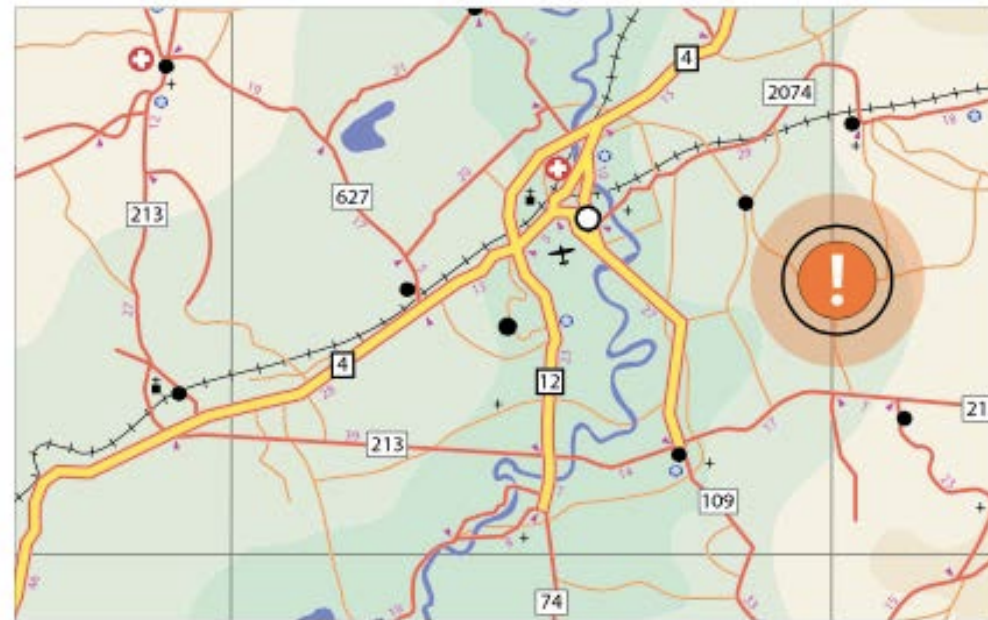- 

**Disaster Management**

# Experiences in Disaster Zones

- First Responders first assess the situation
- Large volumes of Big Data need to be processed
- Varying accuracy
- Lesson: Solutions must deal with in-accuracy

**Disaster Management**

# Some Lessons Learned

- Processing of Personal or Commercial Big Data needs to be in the users control

- When Business Critical / Disaster Recover decisions are being made, build validation into your processes.

- When dealing with many sources of data (e.g. many companies / people / vehicles), data will need to be cleaned.