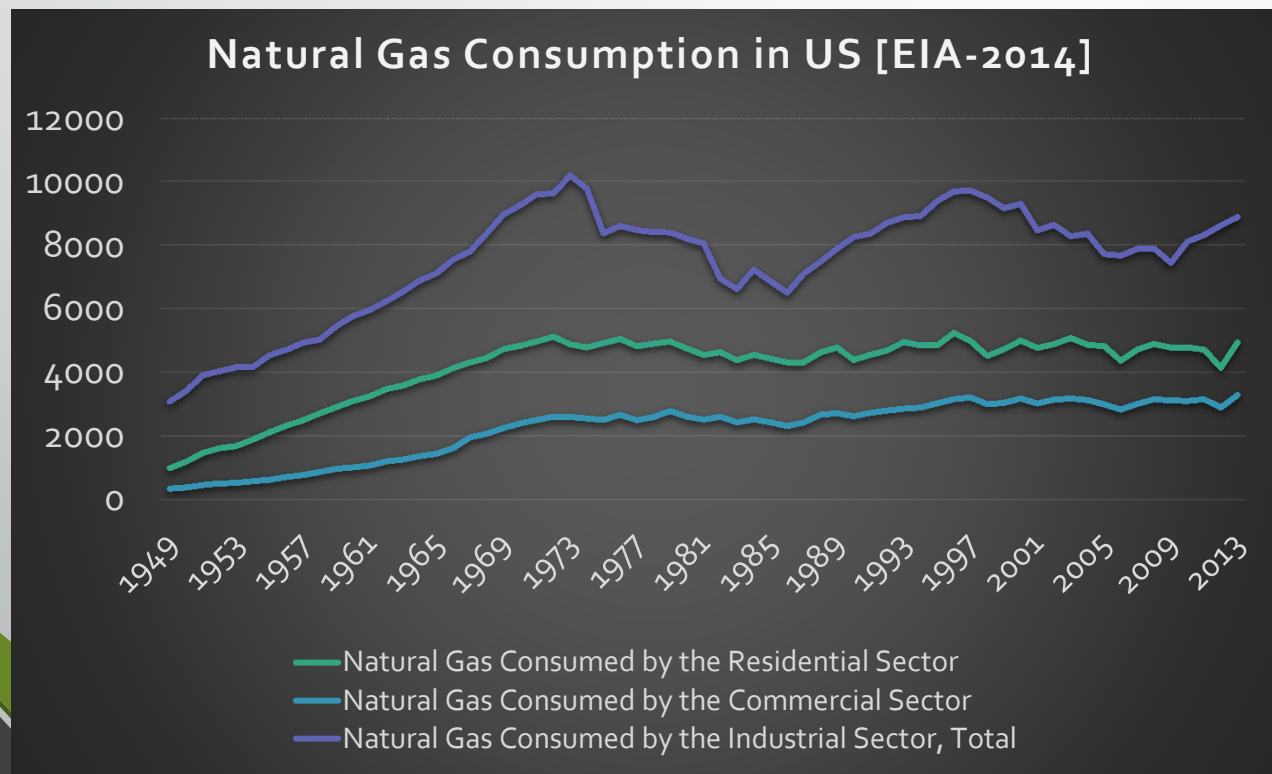


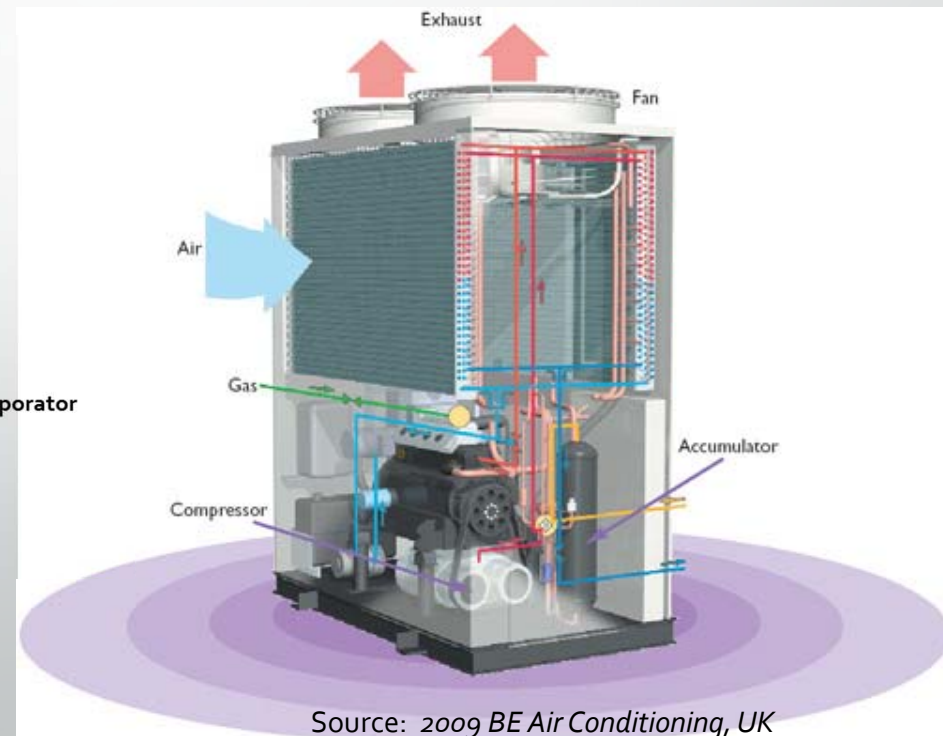
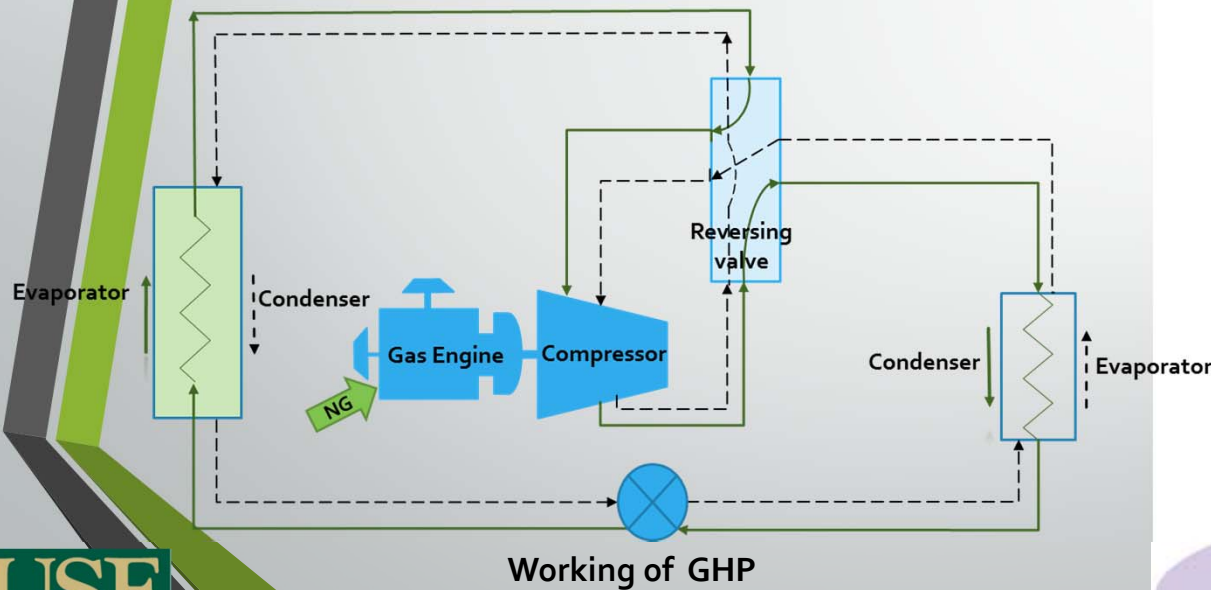
# Performance Evaluation and Field Testing of Gas Heat Pump(GHP)



Increase:

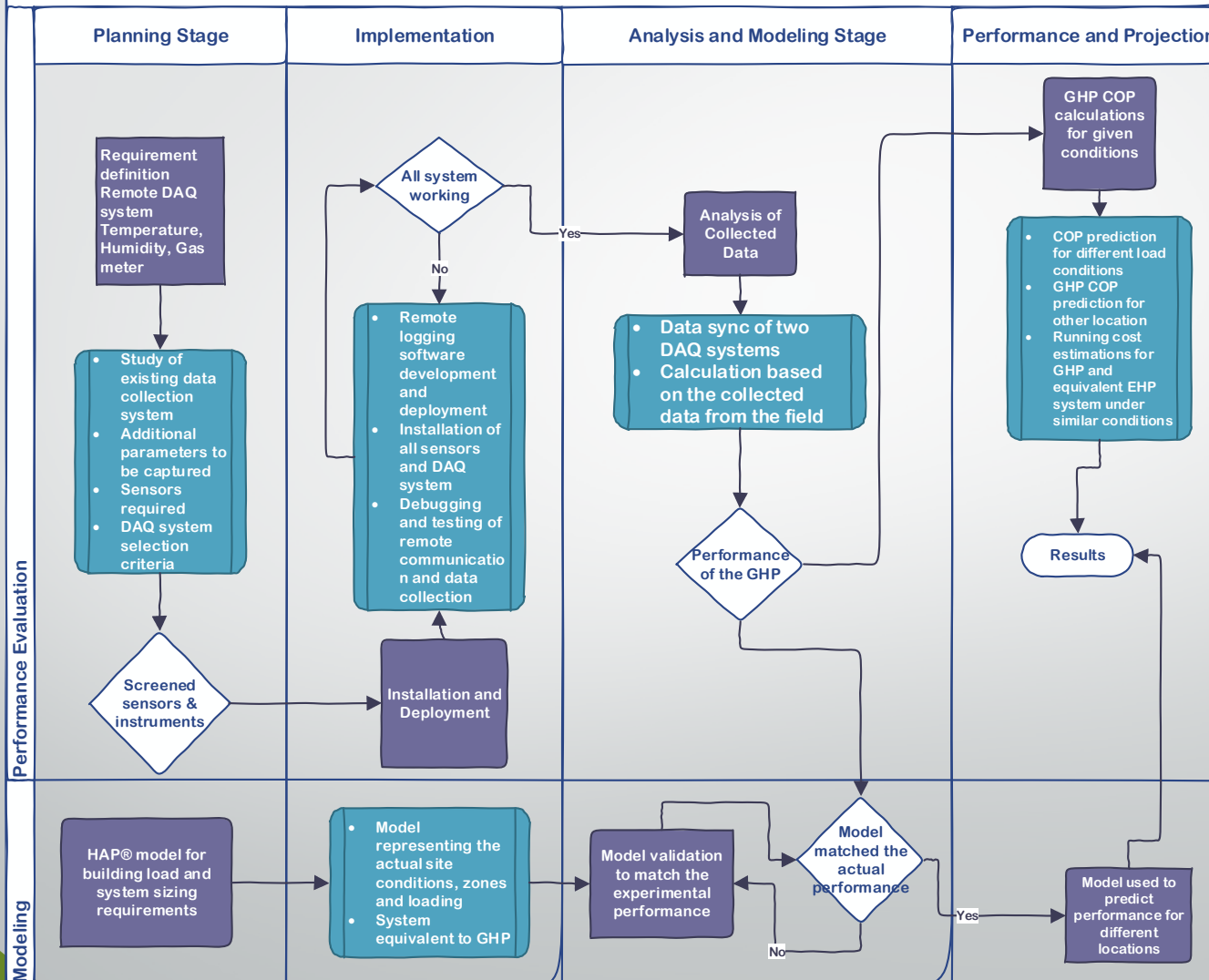
- in interest of utilities in natural gas business
- in demand and supply of GHPs
- in potential in commercial and residential sectors

# Gas Heat Pump



Source: 2009 BE Air Conditioning, UK

# Performance Evaluation and Field Testing of Gas Heat Pump

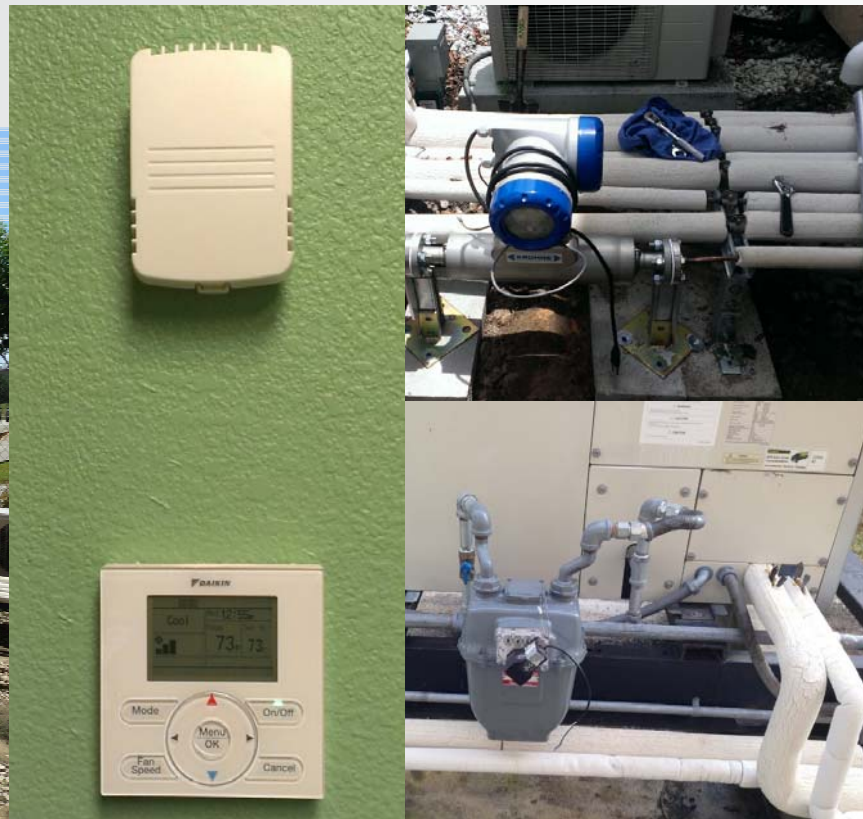


# Instrumentation- FPU office, Debary, FL

Existing GHP



Instrumentation



Remote Data Acquisition system





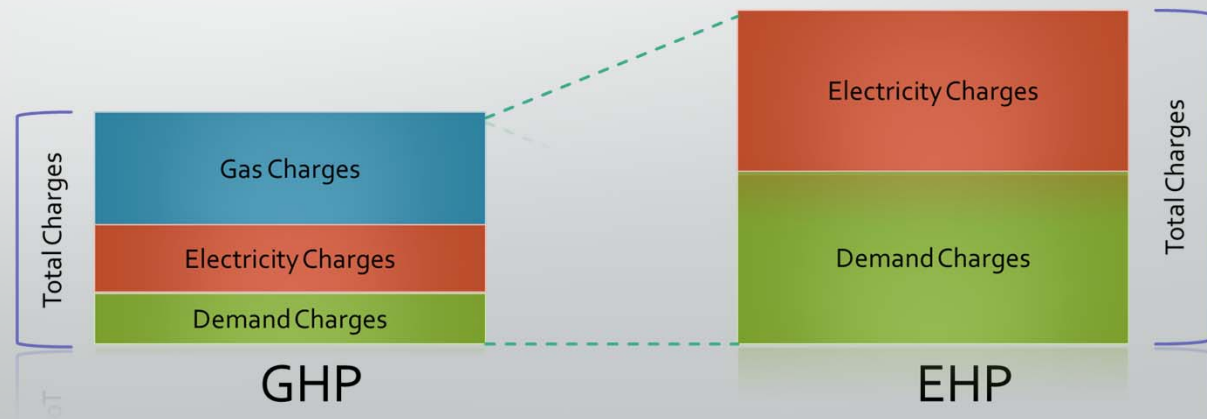
# Comparison of Fuel Consumption and Costs with Electric Heat Pumps



Validation and evaluation (w.r.t. an Electrical Heat Pump)

- Compare the running cost of selected GHP vis-à-vis EHP
- Fuel consumption with use of variable displacement compressor
- Reduction in electricity use during peak and off-peak times?

*Information is only an example and will vary on actual data for US*



Source: <http://www.aisin.co.jp/ghp/english/ghp.html>

Thank you

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