

PERFORMER - Portable, Exhaustive, Reliable, Flexible and Optimized appRoach to Monitoring and Evaluation of building eneRgy performance

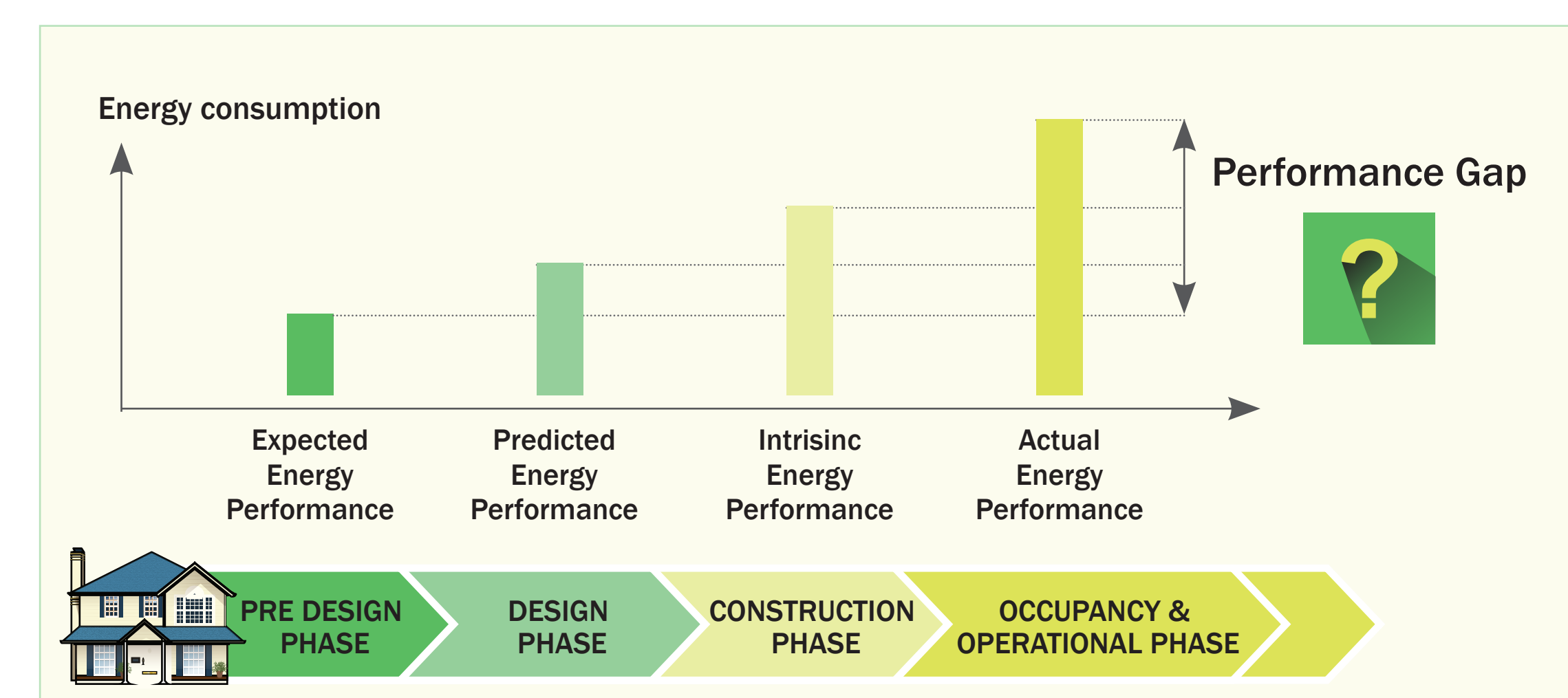
September 2013 – August 2017

In most cases a significant 'energy gap' exists between the amount of energy a building is predicted to use and its actual consumption measured with meters and sensors. The main objective of the PERFORMER project is to develop, install and finally assess an innovative and comprehensive solution towards improved building energy management & guaranteed energy performance. As a result of learnings from the project, PERFORMER will reduce the gap between expected and actual energy performance and promote the energy performance guarantee approach.

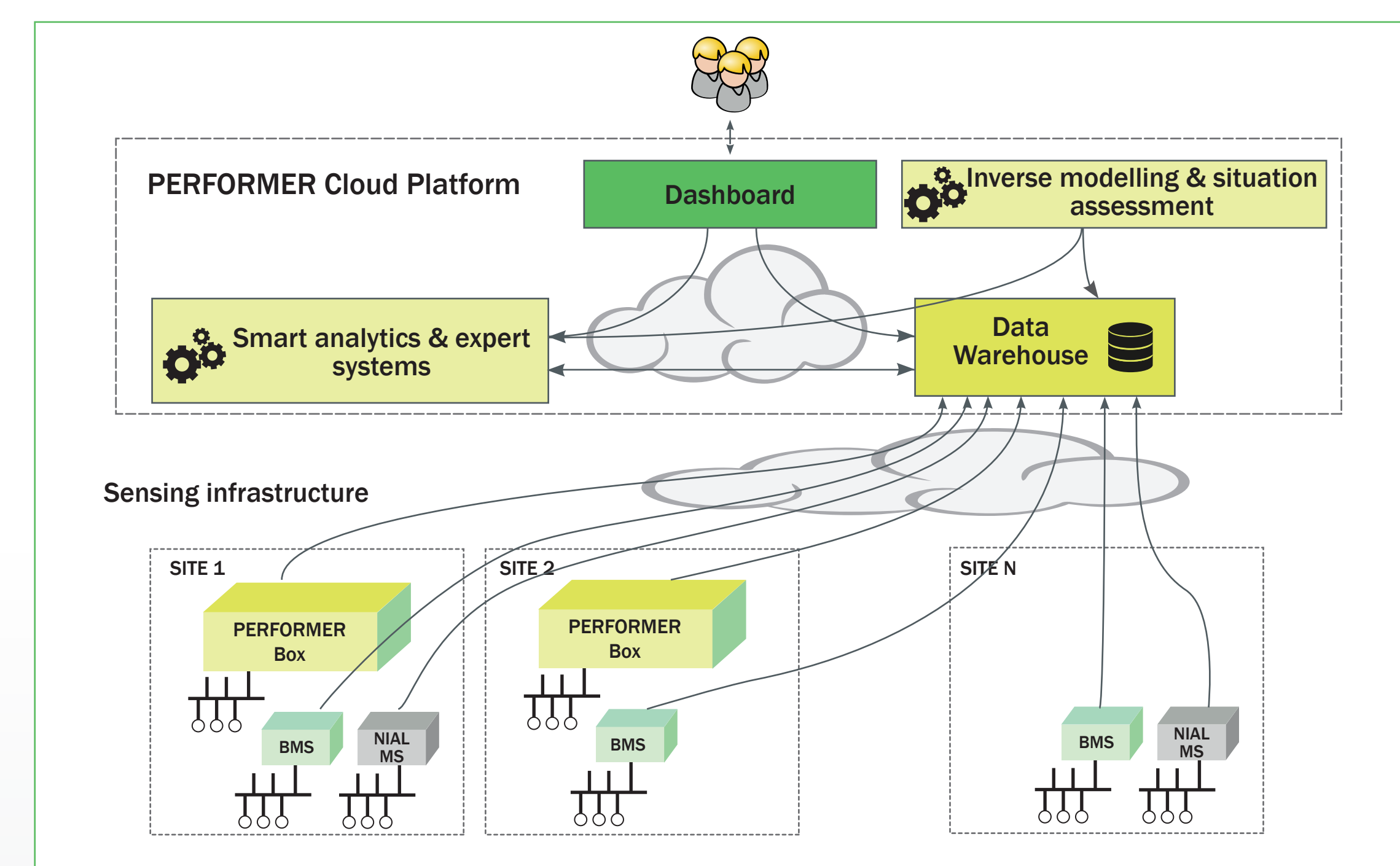
At its core, PERFORMER is an ICT cloud based solution which connects to existing building management systems supplemented by carefully selected specialist equipment. The data collected by the PERFORMER solution is analysed and the results are passed back to users so that they can better understand how their building is using energy, and make changes to reduce energy costs.

PERFORMER's energy performance assessment framework is based on a set of methodologies and integrated off-the-shelf tools that enable a highly sensitive appraisal of the building based on its intrinsic attributes, as well as the internal and external environment.

Project Concept



PERFORMER ICT Framework



Methodologies to support energy management in buildings



Methodology for critical measurement

To measure specific Key Performance Indicators (KPIs) chosen by a PERFORMER client and identify related equipment



Sensor/meter selection methodology

To define cost-optimal sensor solutions in compliance with the customer's needs



Expert Rules platform

To detect and diagnose malfunctions, reduce the gap between set points and actual values



Building information collection standard

To collect the critical information required to enable accurate energy performance assessment

Tools developed to support energy management in buildings



Building energy Key Performance Indicator library

To perform a smart and specific selection of building energy KPIs using predefined libraries



Smart analytics for energy performance monitoring

To forecast and detect deviations in occupant or equipment behaviour thanks to advanced data analysis algorithms



Advanced online platform for site monitoring

To store, manage and process live data collected from instrumented sites and installations



Building envelope performance assessment software

To evaluate the thermal characteristics of the building envelope from on-site measurement

Discover PERFORMER!



Join the Sustainable Places Community supported by PERFORMER



PERFORMER has been tested at four demonstration buildings:

- Baltic Plaza Hotel Medi SPA (Kolobrzeg, Poland)
- Hotel de Las Letras (Madrid, Spain)
- St Teilo's Church in Wales High School (Cardiff, the UK)
- WOOPA office building (Lyon, France).



Partners

