

Integrated information platform to improve energy efficiency in the entire building lifecycle

POSTER

(reserved)

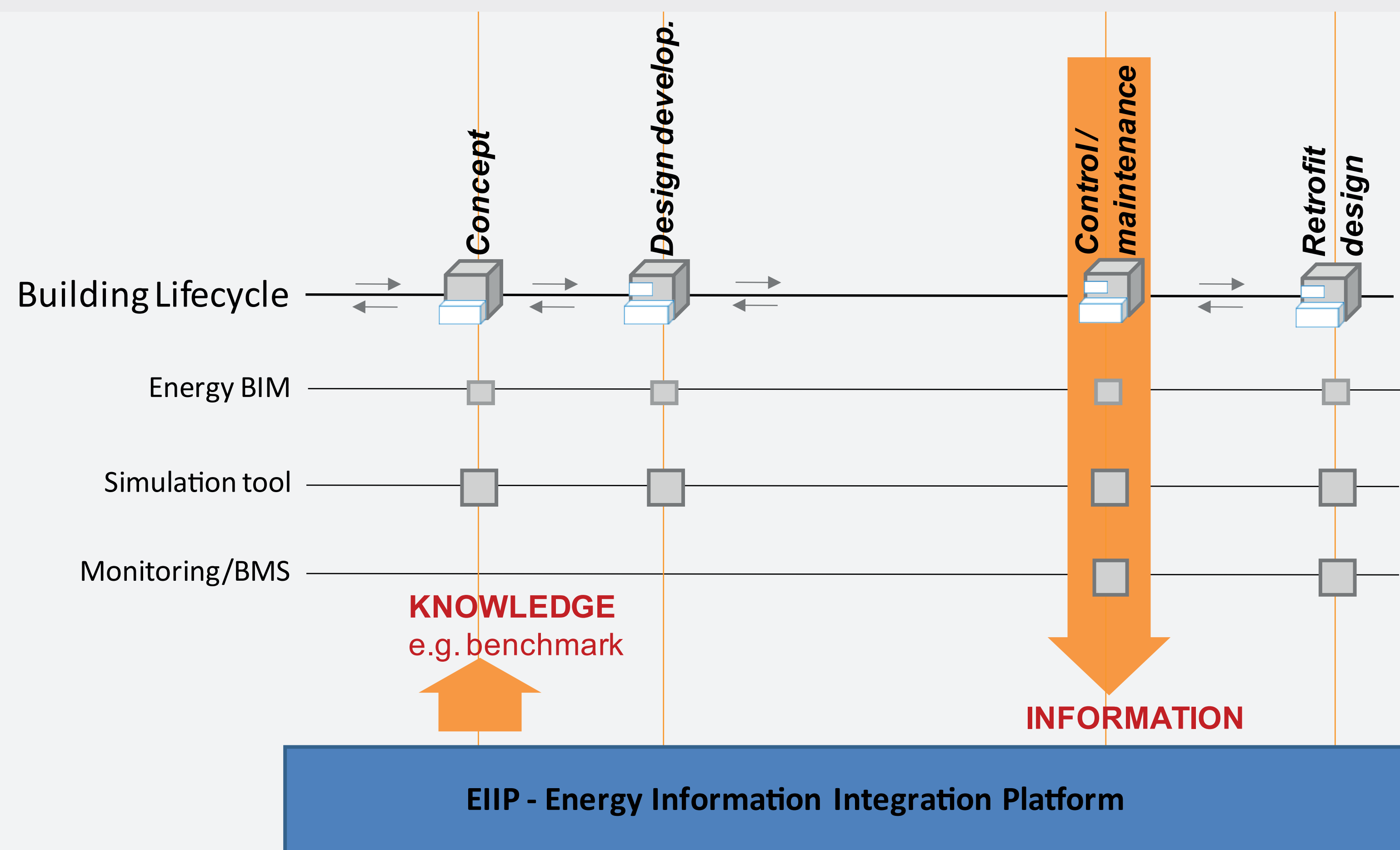
LEANDRO MADRAZO, MARCO MASSETTI, ALVARO SICILIA,
CHRISTOPH PETERS, GLORIA FONT, INES ALOMAR, SERGIO CANTOS
ARC Enginyeria i Arquitectura La Salle, Universitat Ramon Llull, Barcelona, Spain

laSalle

Universitat Ramon Llull

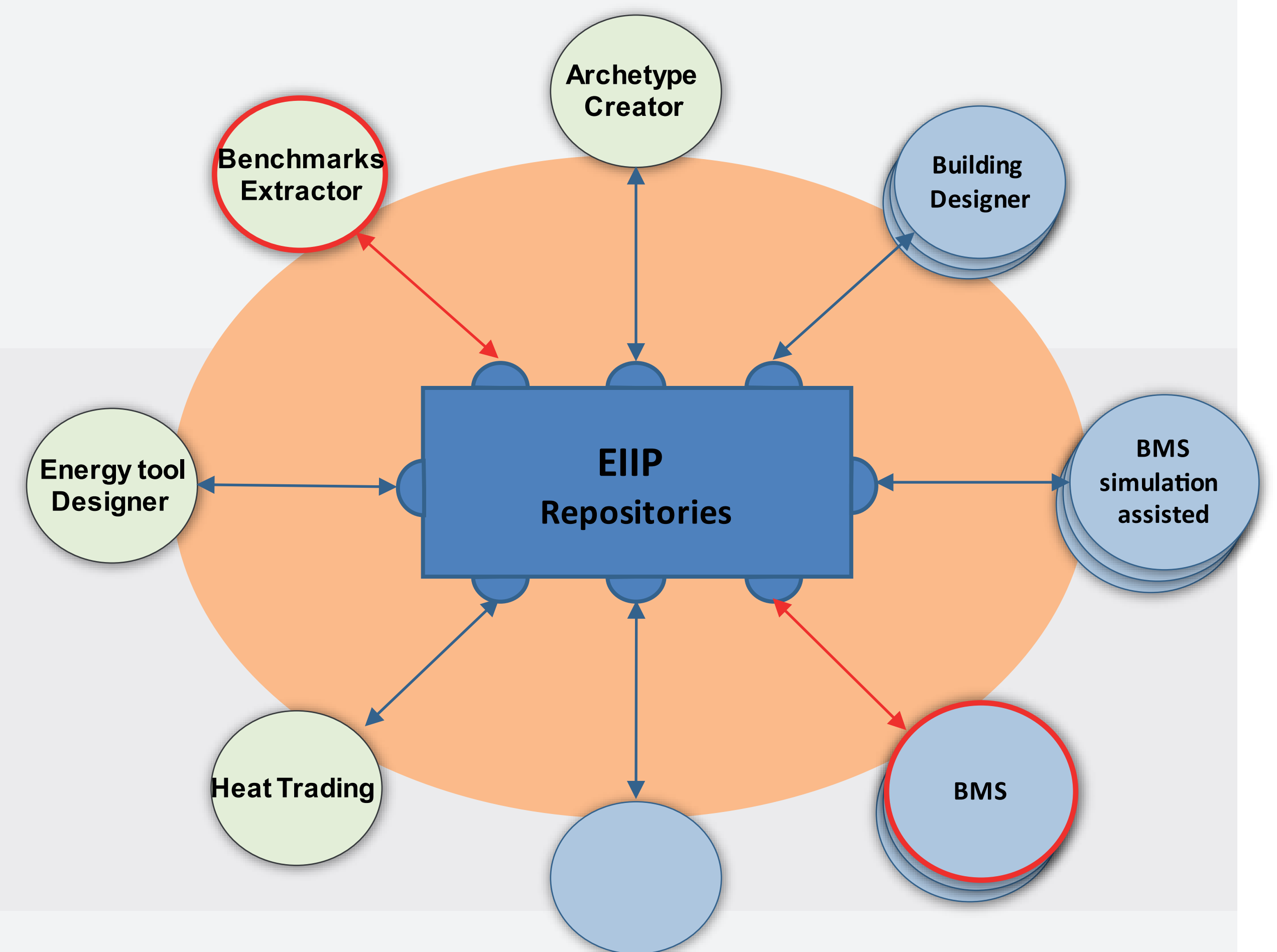
www.salle.url.edu/arc arc@salle.url.edu

Aim of the research > To create an integrated platform which enables different stakeholders storing, modeling and analyzing energy information throughout the entire building lifecycle in order to improve building energy efficiency.

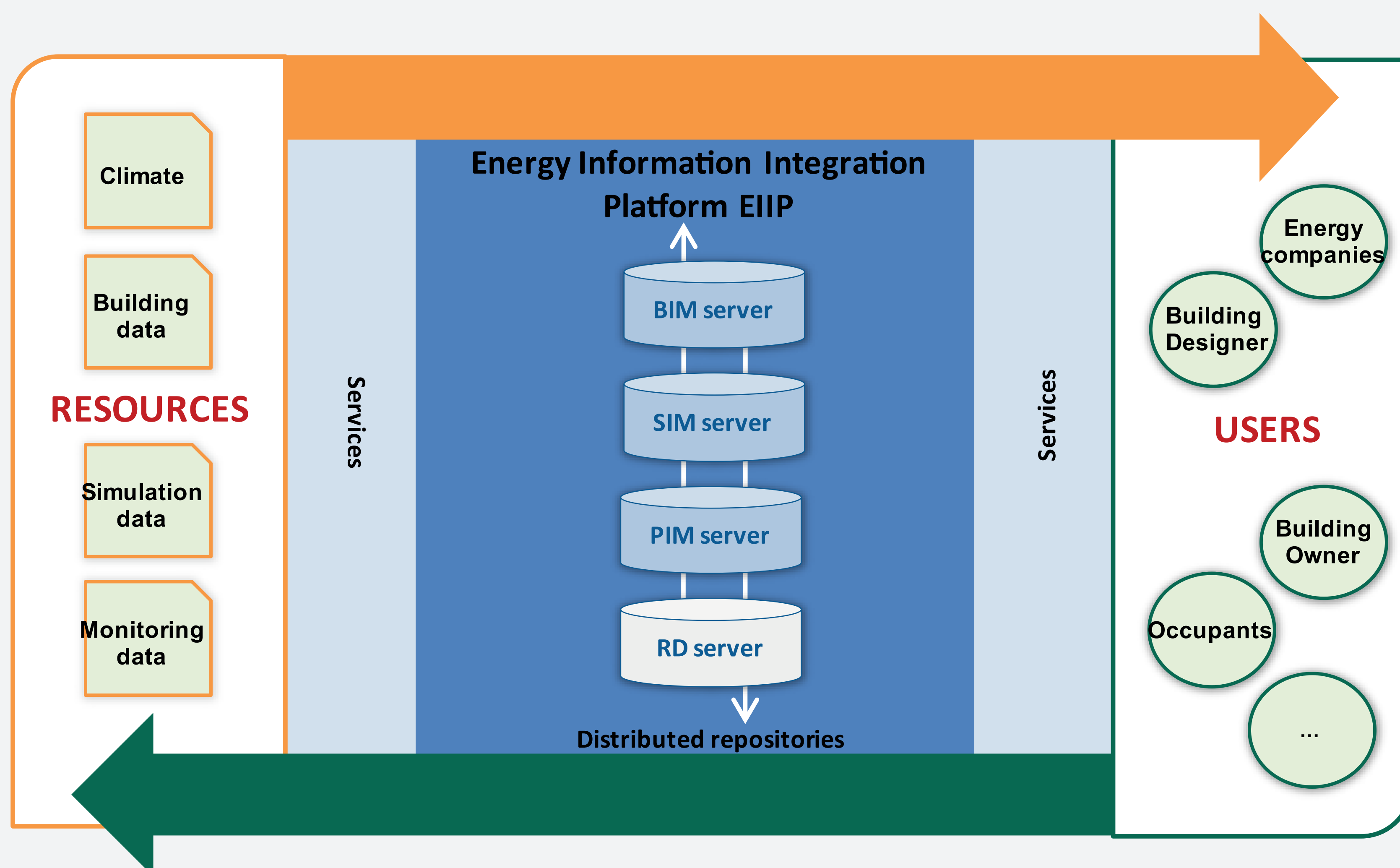


Linking stages through the building lifecycle.

The information collected by the platform at one stage of the building's lifecycle can be used at another stage. For instance, energy monitoring data from existing buildings can be used in the design of a new building of the same type, with similar climate conditions. This way, the platform can support performance-based design.



Connecting heterogeneous components. The platform facilitates the connectivity between commercial applications (e.g. BIM, simulation programs) and platform specific services (e.g. benchmarking extraction) used by different stakeholders along the design, construction and monitoring stages.



Energy information Cycle. Dedicated services enable:

- data storage from different resources
- information retrieval from the platform repositories:
- storing building descriptions in a BIM repository
- storing simulation outputs in standard forms in the SIM repository
- storing energy performance data in the PIM repository

The services can be performed asynchronously by different stakeholders using tools external to the platform.

projects **IntUBE** (FP7 ICT program) 2008-11: energy information integration platform

REPENER (Spanish RDI plan) 2009-12: energy information analysis with data mining techniques.

CAAD
futures
2011

CAAD Futures 2011 • Designing together
@ LUCID • University of Liège • BELGIUM • 4 > 8 July 2011

