



A demonstration project co-financed by
the European Commission.
(TREN/04/FP6EN/S07.31838/503188)



SARA



SUSTAINABLE
ARCHITECTURE APPLIED TO
REPLICABLE PUBLIC
ACCESS BUILDINGS

COMMON SYMPOSIUM OF EU FP6 ECO-BUILDING PROJECTS,
Berlin, 22nd - 23rd November 2005

Mike Barker,
Project Coordinator
Universitat de Barcelona

SUSTAINABLE ARCHITECTURE APPLIED TO REPLICABLE PUBLIC ACCESS BUILDINGS

Objectives: (x 7 buildings):

- > 30% reduction in CO2 emissions
- Reduction in the consumption of non-renewable energy sources
- Reasonable overcosts ~5% (<50 Euros /m²).
- Innovation
 - Integration of BMS data, monitoring and www based dissemination and training
- Instant Replicability
 - Near-market solutions
 - Specific plans for replication
- Strong dissemination plan
 - General Public
 - Professionals
 - Education & Training

Introduction



Buildings



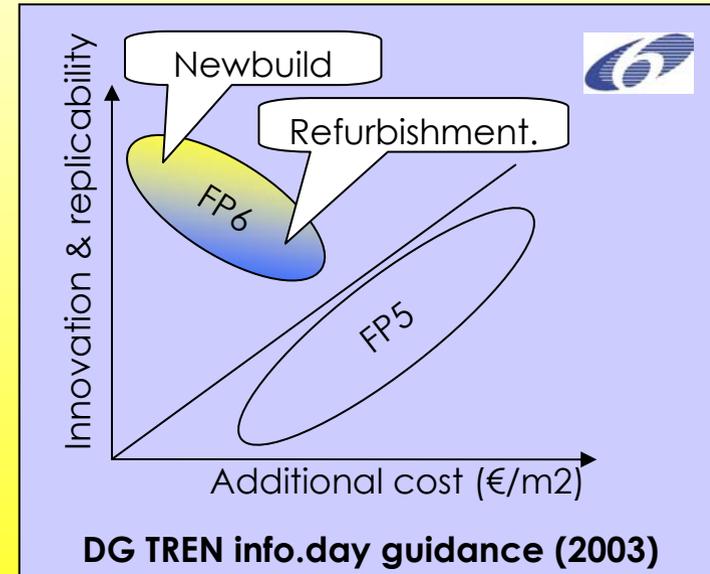
Innovation



Summary



Conclusion



The Magnificent 7



www.sara-project.net

Austria
Office/ Lab

France
Primary
School

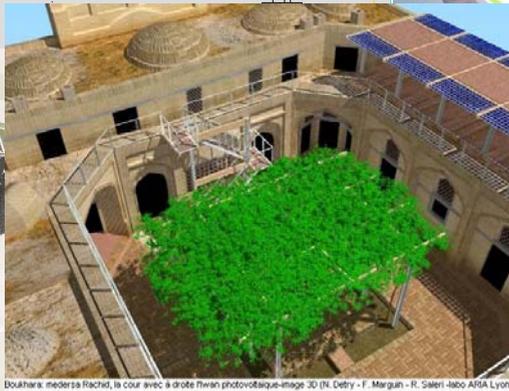
Italy
Cultural centre
(refurb.)

Slovenia
Supermarket

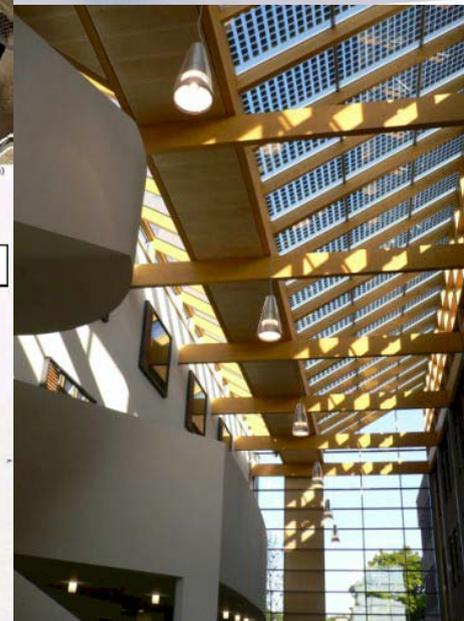
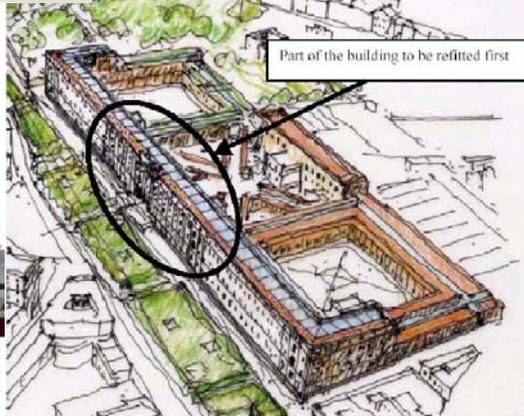
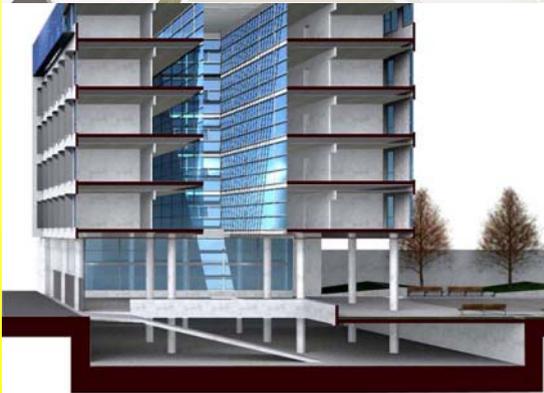
Spain
Health Care
Centre

U.K.
Uni. Services
building

Uzbekistan
Cultural centre
(Refurb.)



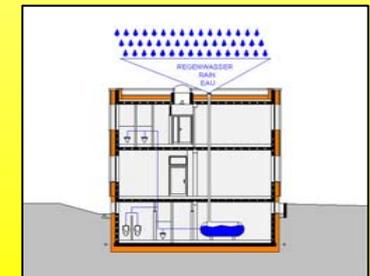
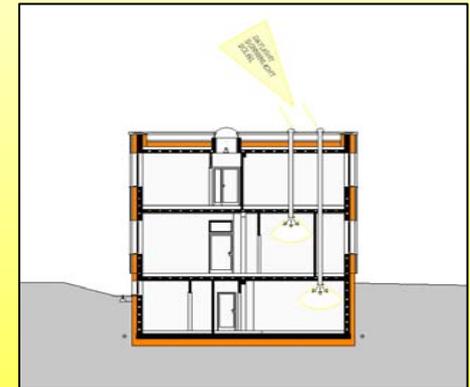
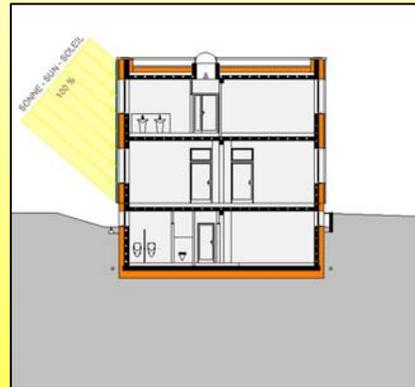
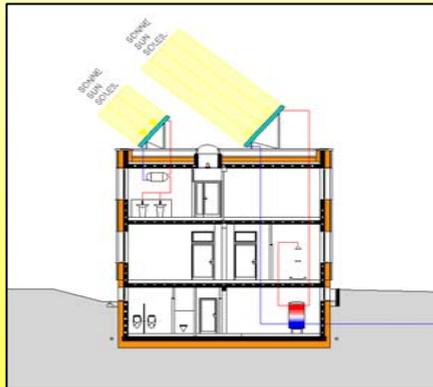
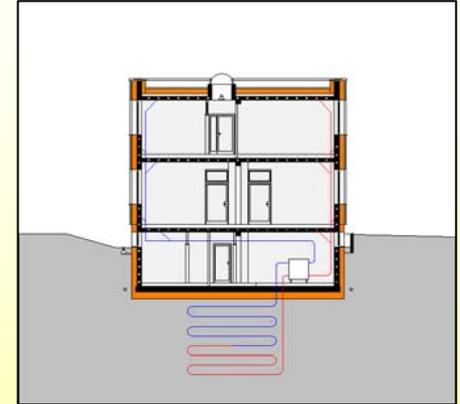
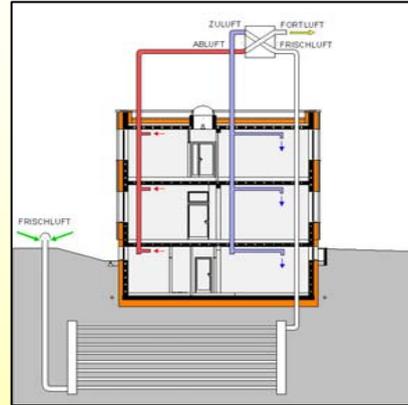
Doukhara medersa Rachid, la cour avec à droite l'ancien photovoltaïque-image 3D (N. Detry - F. Marguin - R. Saleri -Ibco AFIA Lyon)



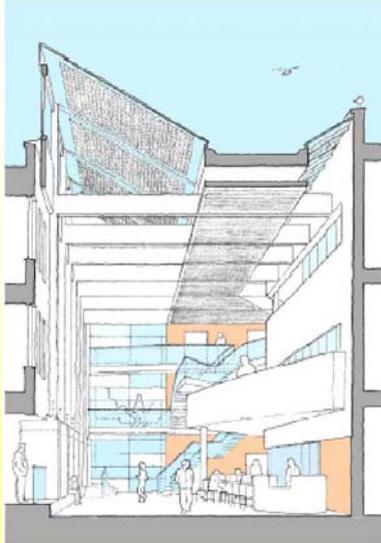
eco buildings



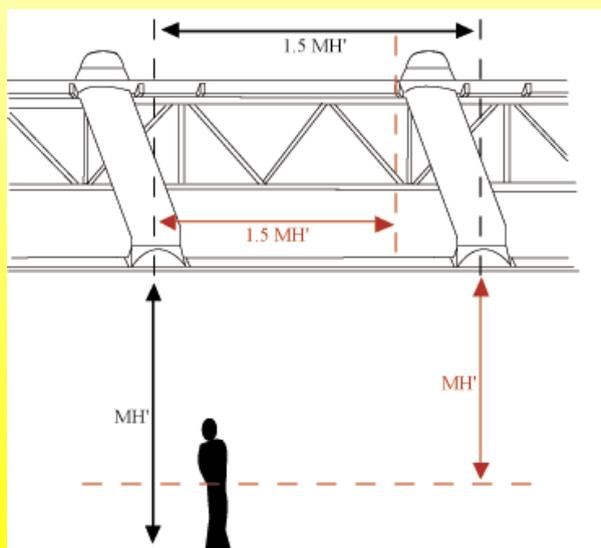
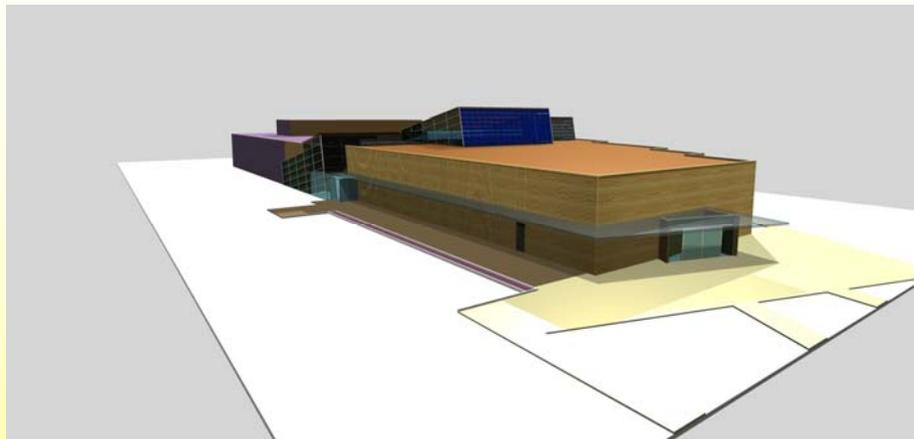
Offices, laboratories and test facilities in Vienna, Austria (2900 m²)



Student Services Centre Uni. Of Southampton, UK (2600m²)



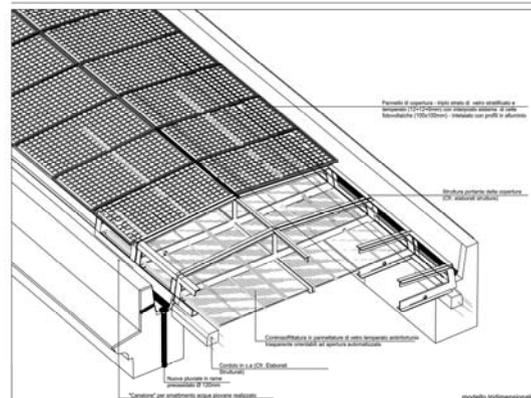
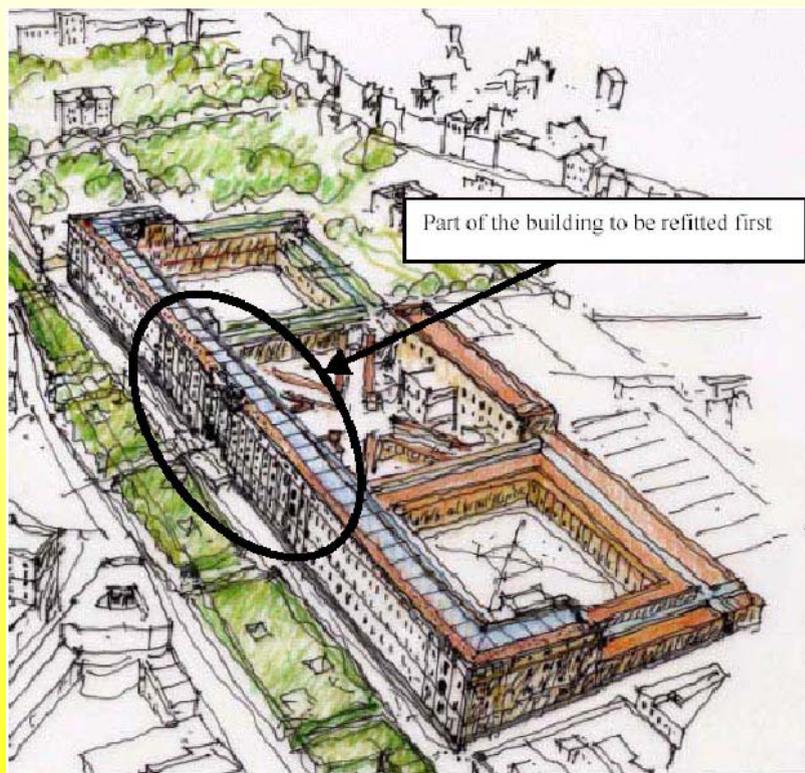
Supermarket in Ljubljana, Slovenia (5796m²)



Primary School in La Tour de Salvagny, France (2200m²)



Cultural Centre en Napoles, Italy (7500m2 refurb.)

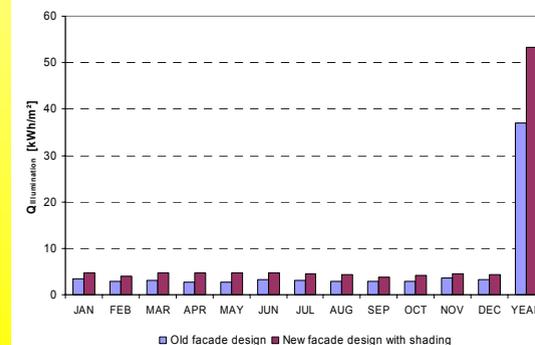
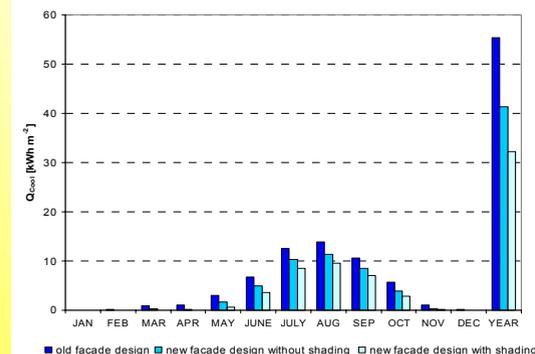
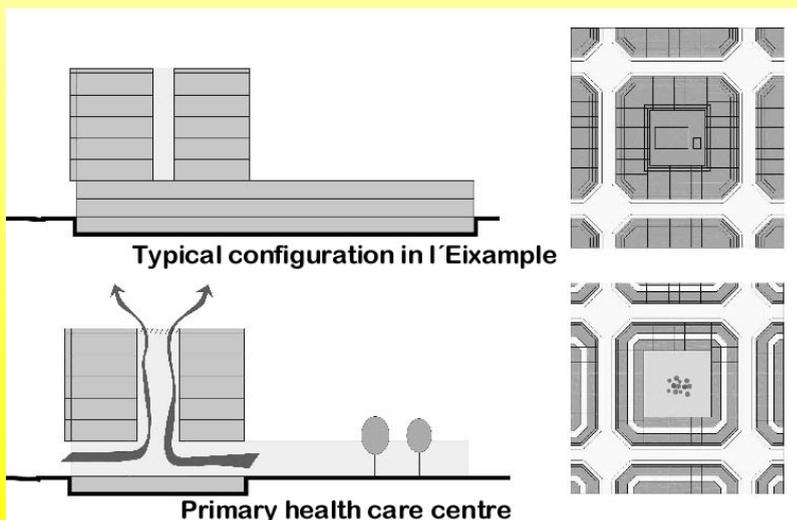


Cultural Centre in Bukhara, Uzbekistan (750m² Rehab.)



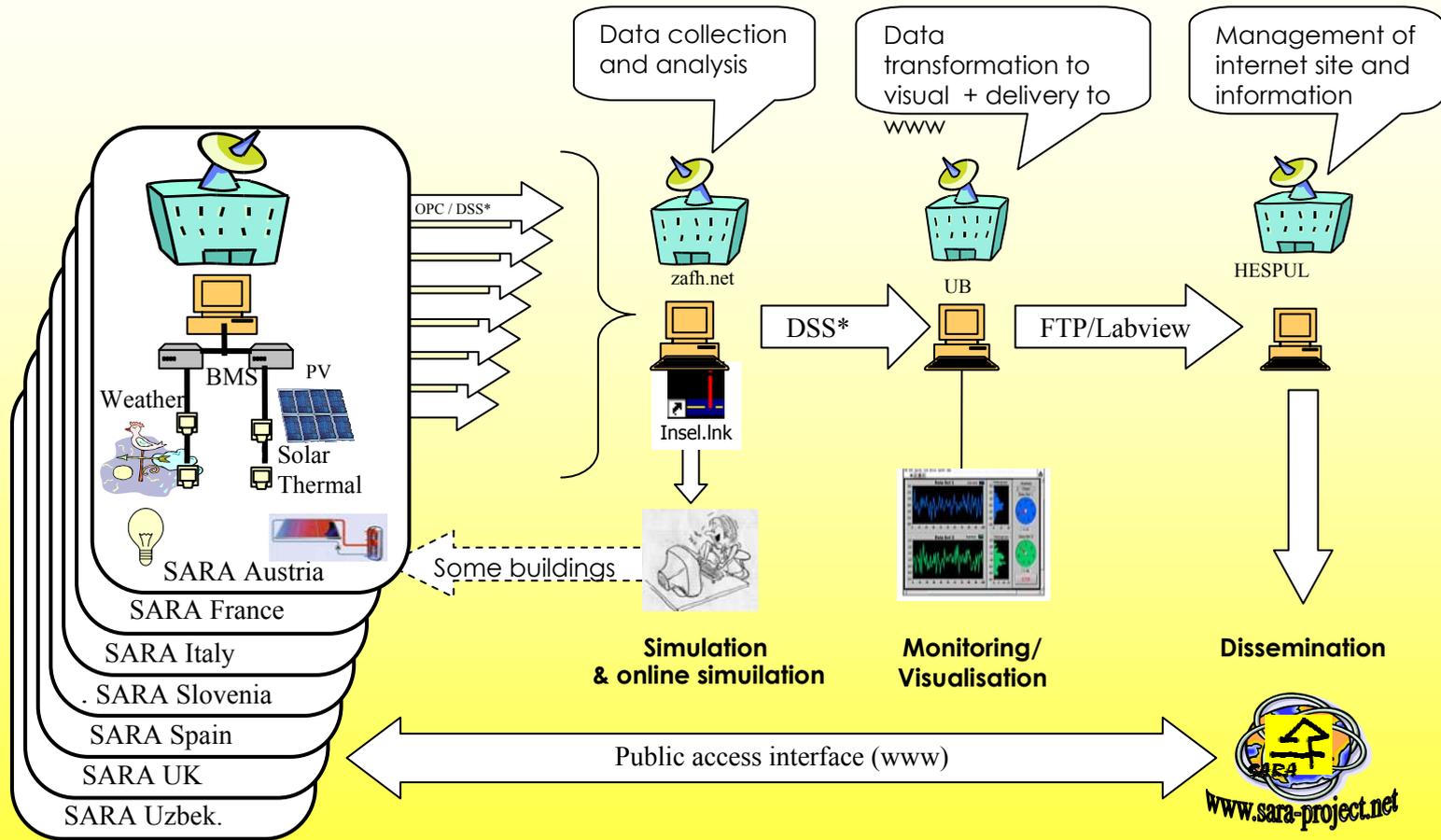
Boukhara: medersa Rachid, la cour avec à droite l'Iwan photovoltaïque-image 3D (N. Detry - F. Marguin - R. Saleri -labo ARIA Lyon)

Primary Health Care Centre in Barcelona, Spain (3000m²)



Innovation: BMS and Monitoring

- Introduction
- Buildings
- Innovation
- Summary
- Conclusion



*DSS: DataSocketServer

WP8: Dissemination – from the start



www.sara-project.net

- www.sara-project.net
- Newsletter
- Poster
- Targeted network (professionals)
- Awareness raising (users)
- Calendar of events – maintaining interest
- + Common dissemination activities:
www.ecobuildings.info

SARA BULLETIN
Sustainable Architecture Applied to Replicable Public Access Buildings
March 2005
Issue 1

Introduction
This is the first of what will be a series of bulletins that aim to provide up to date news of progress in the SARA project and offer timely information regarding work to be done opportunities to be explored.

Project Summary
SARA aims to construct sustainable, cost effective, high energy performance, public-access eco-buildings. The project uses market ready technologies in innovative and integrated design solutions to demonstrate that significant reductions in the environmental impact of energy use in public access buildings is possible, viable and widely replicable in other buildings.

Project Partners
Each issue offers the opportunity to feature one or two case studies in more detail. For example, in this issue there is information about reporting and an amendment to the contract as well as information about the project logo, and, of course, the ecobuildings.

Project Partner Area
If you would like to use the bulletin to communicate an aspect of the project that you are responsible for, or have suggestions to make, please contact the coordinator.

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Please note change of address, fax and e-mail

Building Performance Monitoring and User Feedback
Building Management System (BMS) will allow monitoring of energy consumption and production. Demonstration buildings will use Intelligent Control Strategies to optimize energy performance through innovative strategies. An integrated monitoring and simulation tool will allow the direct transfer of well-tested control algorithms to the BMS and give feedback during operation about real and simulated performance within the given climatic boundary conditions. Clear visualisation schemes will allow Building Managers to understand and influence the implemented control strategies. Selected building energy data will be available on the SARA Project website for educational purposes.

Project n° TREN/04/PAEN/507.31838/503180
www.sara-project.net



SARA Summarised

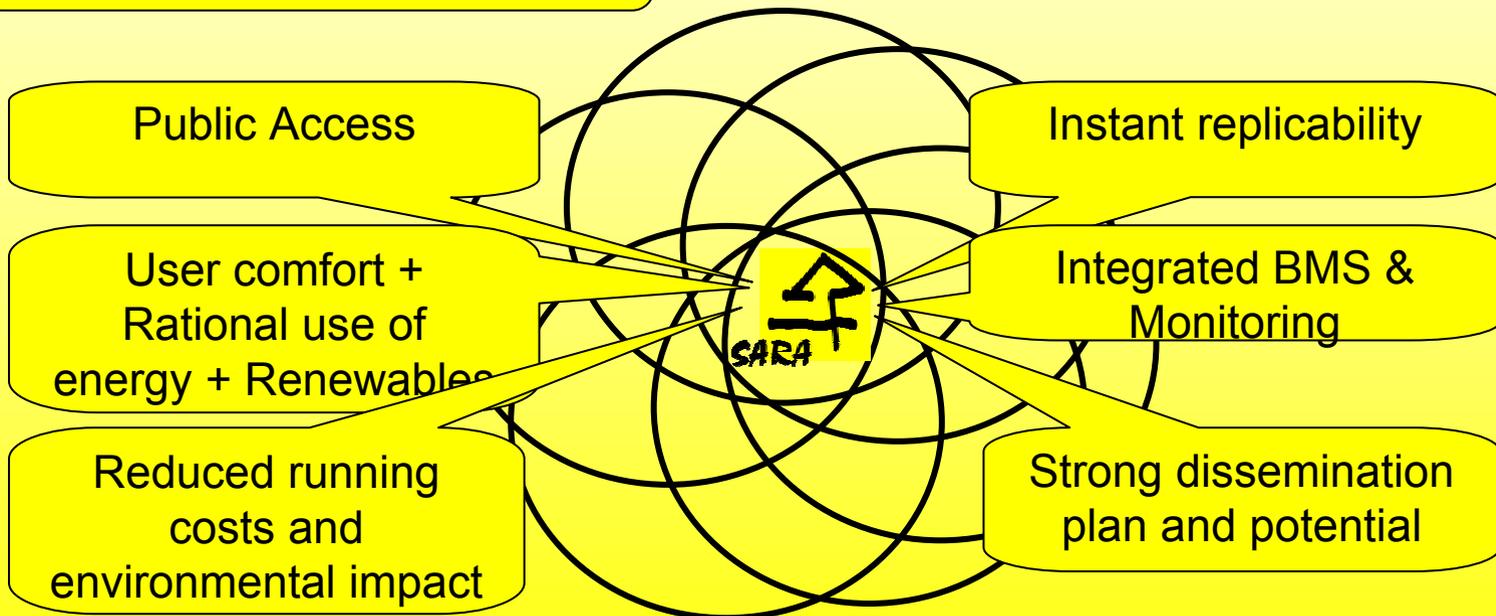
Building Type

- Sara involves a wide range of building types
- Sara includes new build and refurbishment projects

Architecture & technology

- Distinct approaches are used in each building
- There are share common solutions and interests
- Technical advice and support is provided to all buildings

So, where is the focus?



Introduction

Buildings

Innovation

Summary

Conclusion

Who?

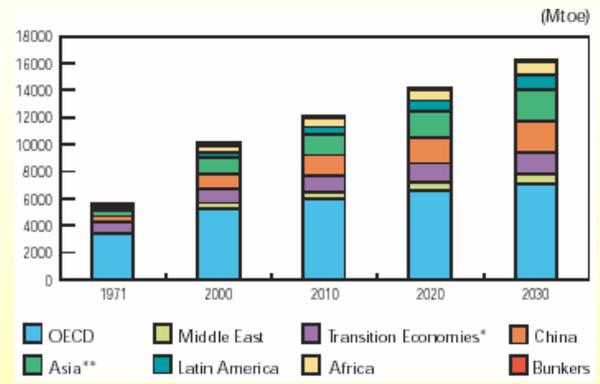
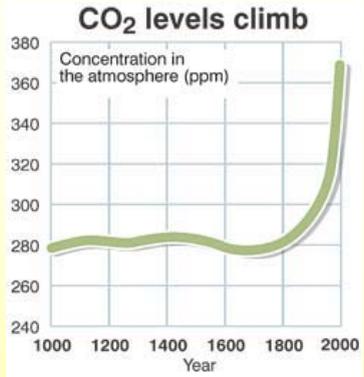
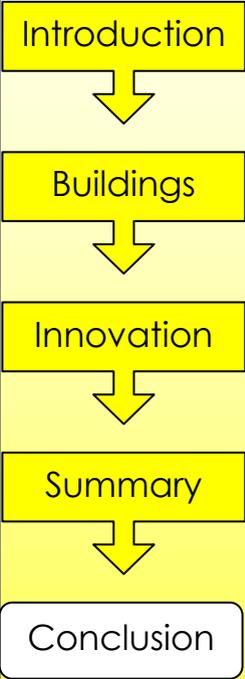
	<u>Organisation</u>	<u>Acronym</u>	<u>Country</u>
1	Universitat de Barcelona	UB	Spain
2	Institut Català d'Energia, GenCat	ICAEN	Spain
3	Departament de Medi Ambient, GenCat	DMA	Spain
4	Departament de Sanitat i Seguretat Social, GenCat	DSSS	Spain
5	Business & Science Park Vienna	BSV	Austria
6	Arsenal Research (Österreichisches Forschungs- und Prüfzentrum Arsenal Ges.m.b.H)	ARS	Austria
7	University of Southampton	SOTON	UK
8	Oxford Brookes University	OBU	UK
9	Poslovni sistem Mercator	MERCATOR	Slovenia
10	University of Ljubljana, Faculty of Civil and geodetic Engineering	ULFGG	Slovenia
12	Mairie de la Tour de Salvagny	TSALV	France
13	HESPUL	HESPUL	France
14	Comune di Napoli	NAP	France
15	Association Tessellatus	TESSEL	France
16	Zentrum für angewandte Forschung nachhaltige Energietechnik	ZAFH.NET	Germany



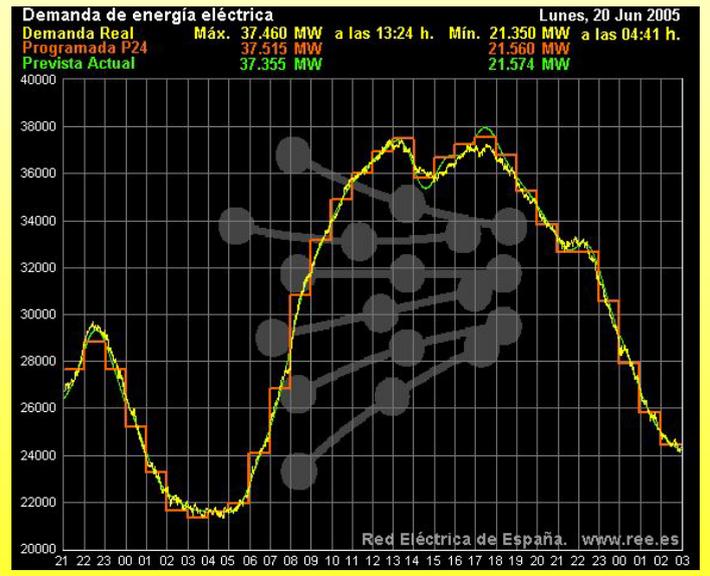
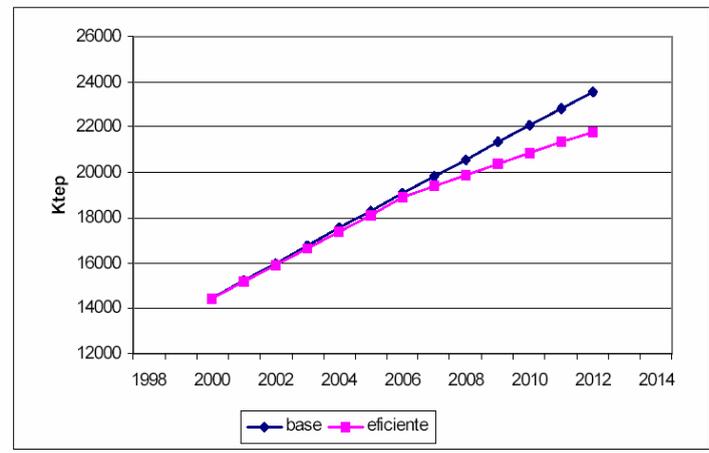
Generalitat de Catalunya



The context



Consumo Energético del Sector Edificación en los Escenarios Base y Eficiente



Sources: Ministerio de Economía 2003, IEA Energy World 2004, Estrategia de Ahorro y Eficiencia Energética en España 2004-2012, Red Eléctrica Española

Thank you for your attention



www.sara-project.net

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