



OVERVIEW OF OSIRYS PROJECT:

In which construction systems can
Eco-solutions be used?

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TECNALIA

INDEX OF THE PRESENTATION

- Characteristics of the building stock in Europe
- Osirys products
- Characteristics of the different products
- Target typologies of buildings
- Typologies of construction

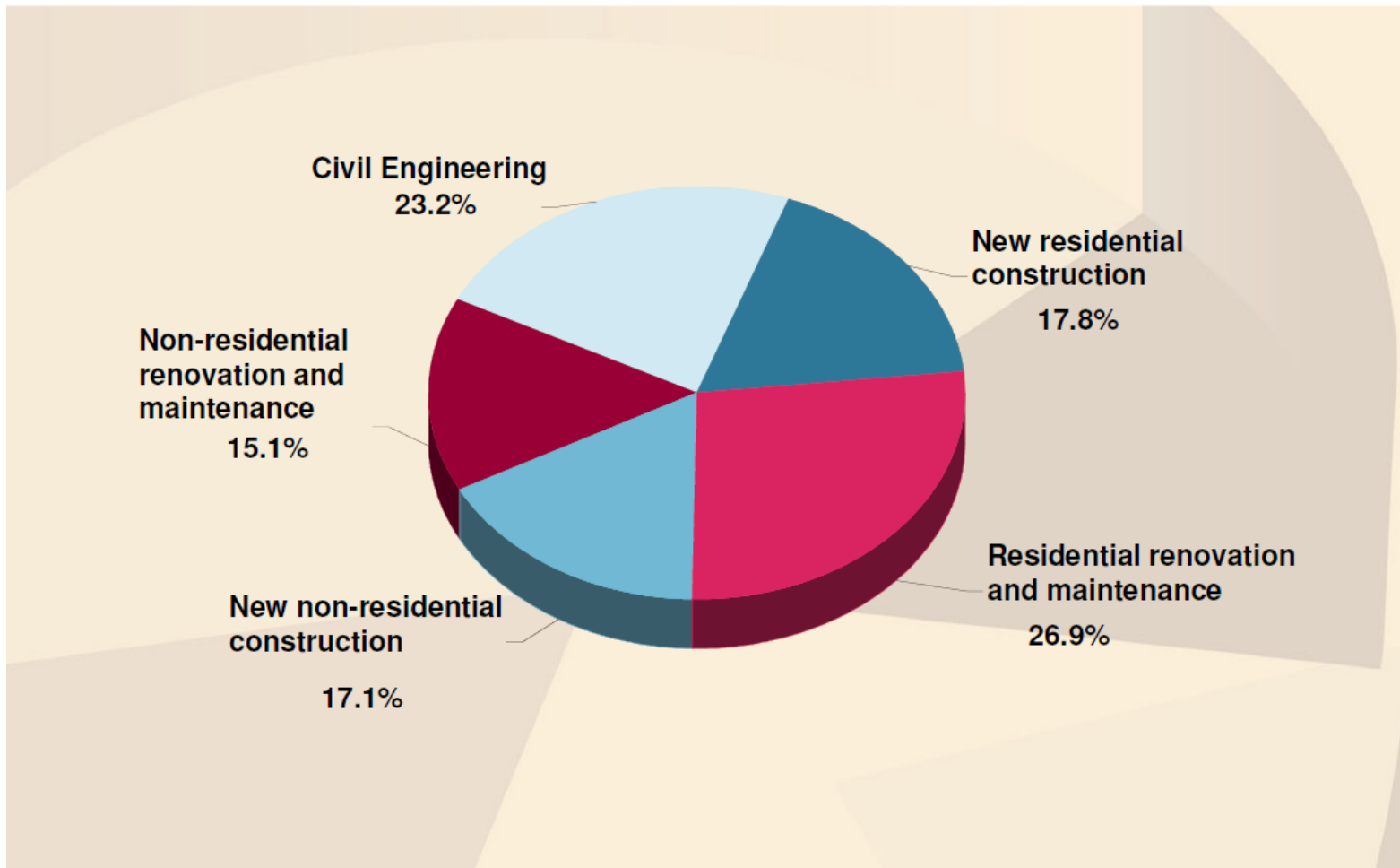


CHARACTERISTICS OF THE BUILDING STOCK IN EUROPE



European construction market: € 1,300 billion

2011, share by sector



European construction outlook to 2014 – Eurofer, 8th December 2011

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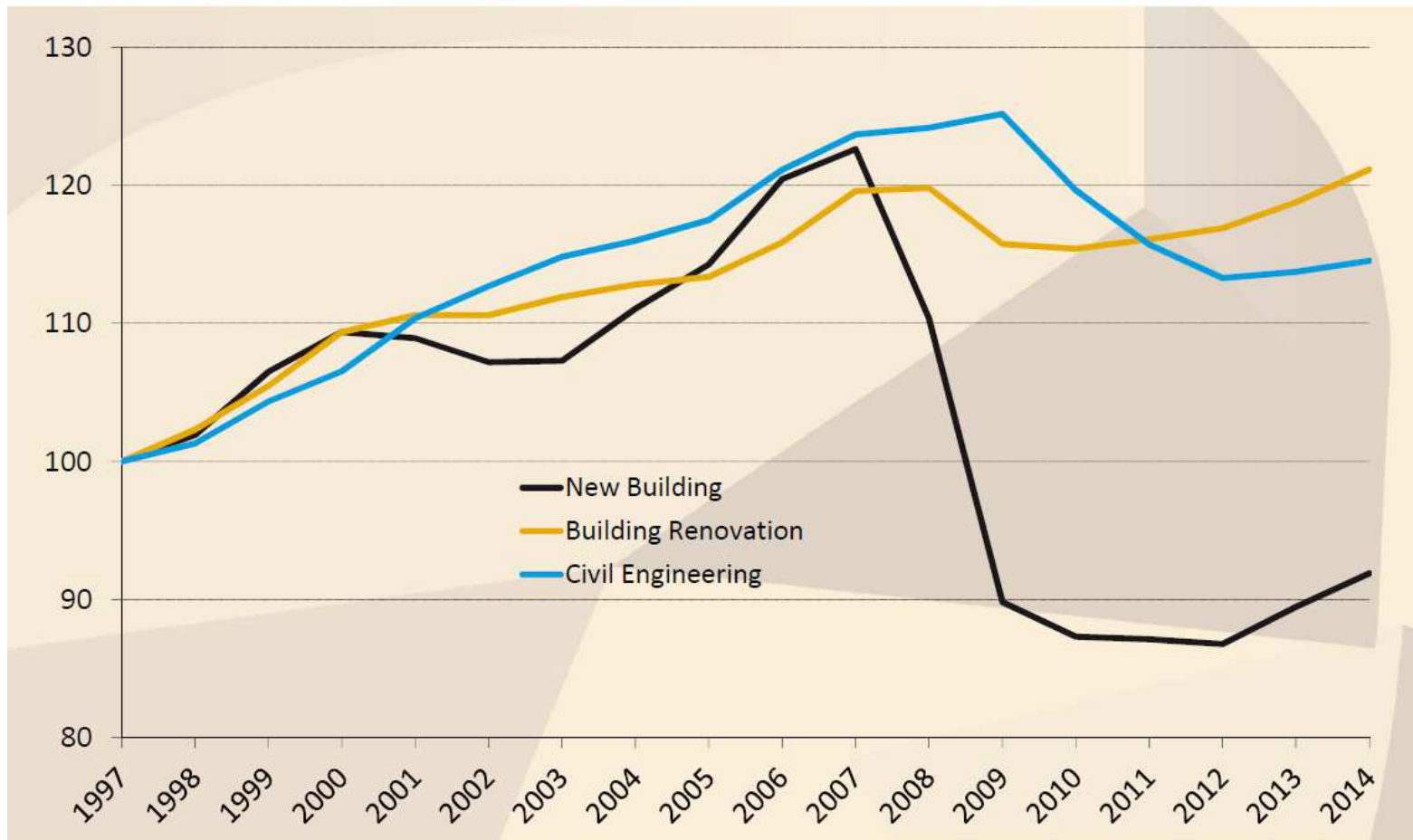
Stakeholder Panel Meeting, 9th May 2014, Paterna (Spain)

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European construction market

index 1997=100



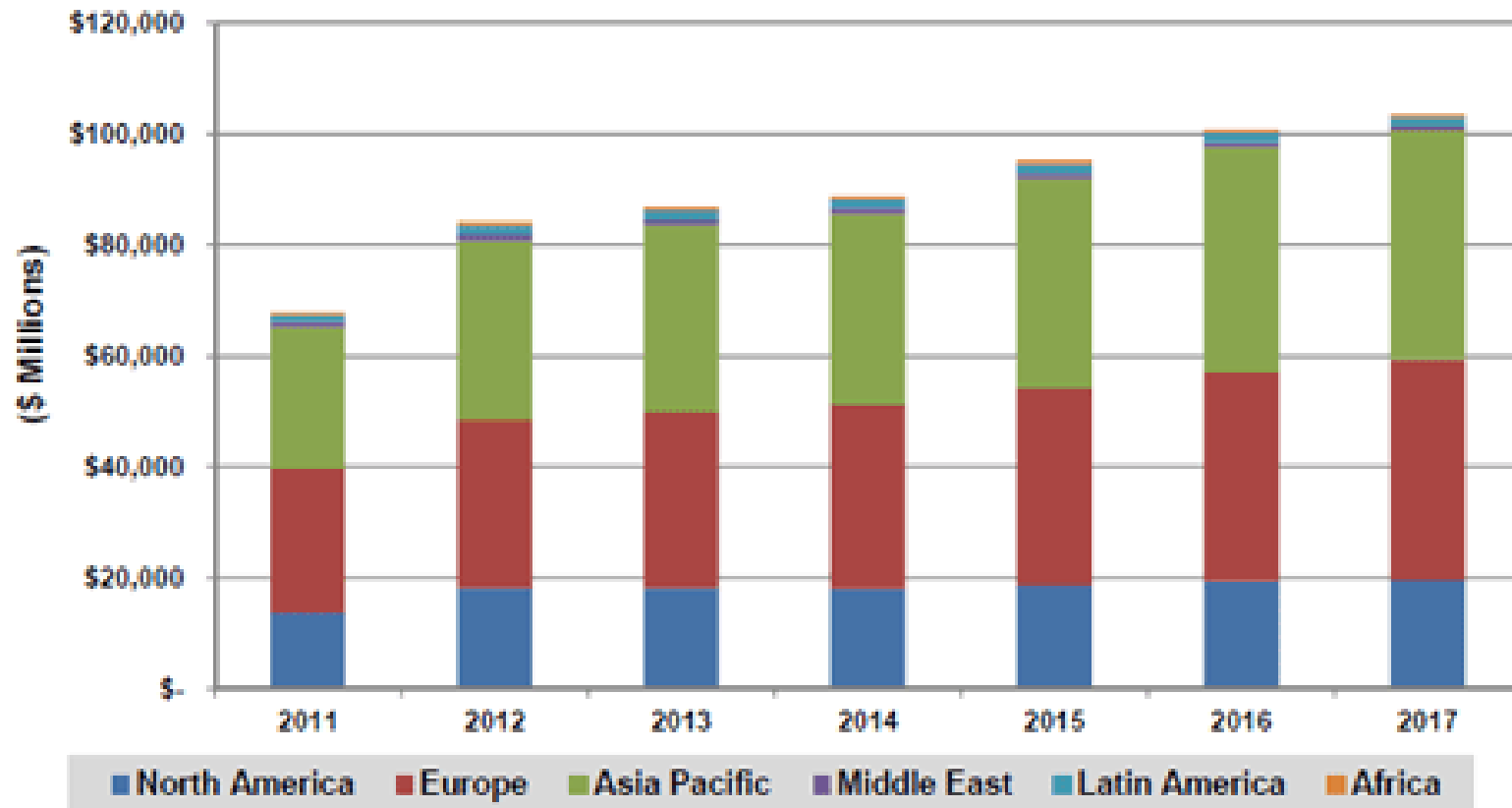
European construction outlook to 2014 – Eurofer, 8th December 2011

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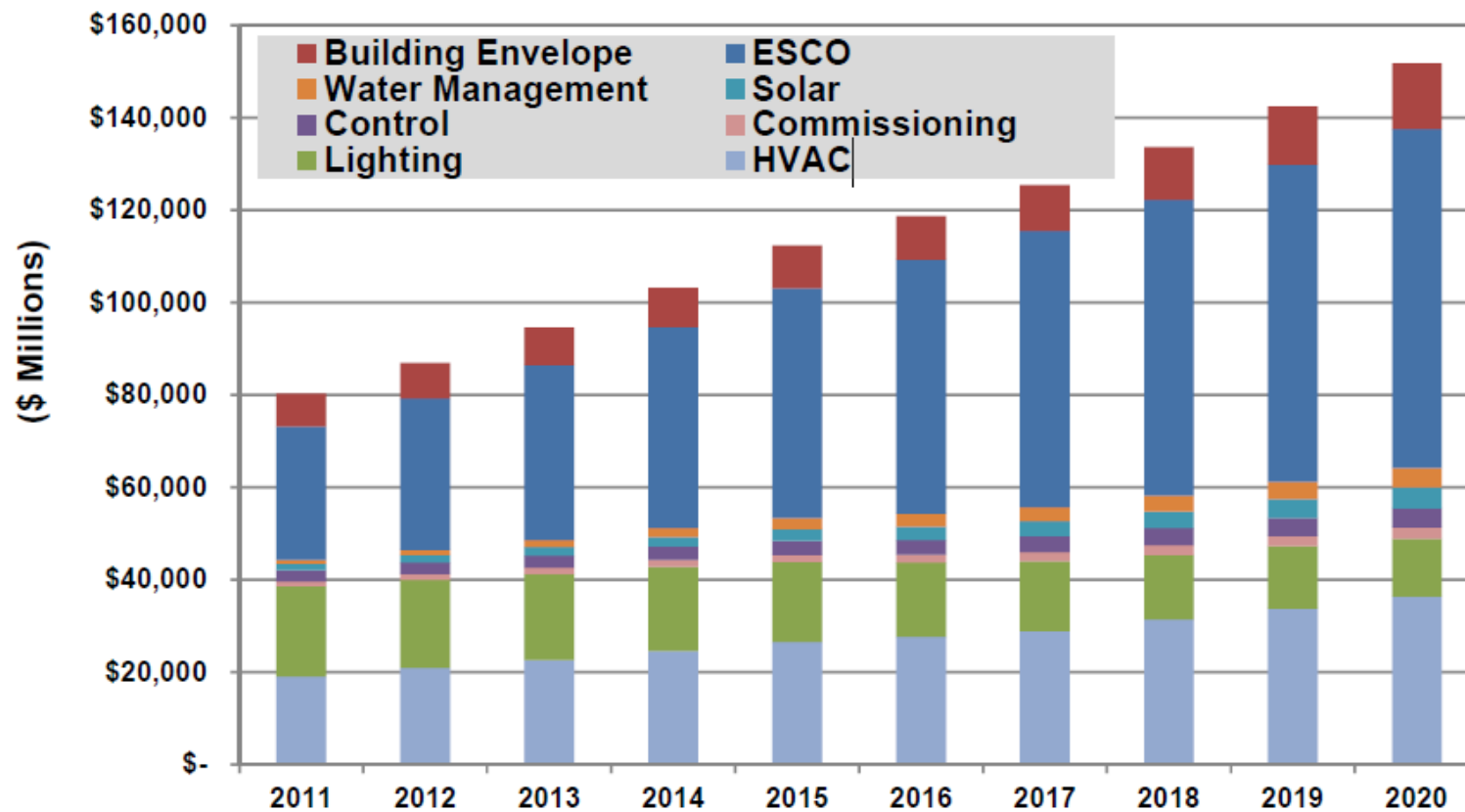
CHARACTERISTICS OF THE BUILDING STOCK IN EUROPE

Chart 1.1 Energy Efficient Buildings Market by Region, World Markets: 2011-2017



CHARACTERISTICS OF THE BUILDING STOCK IN EUROPE

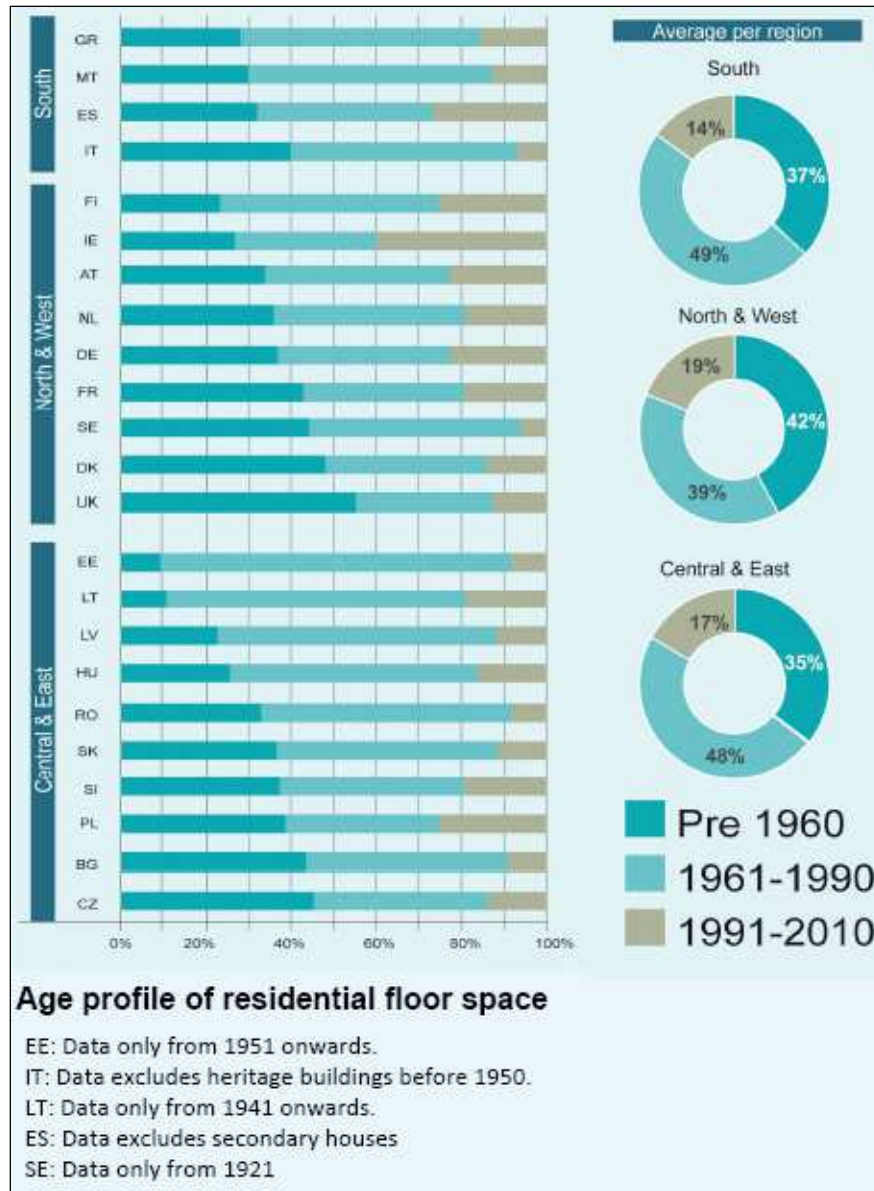
Chart 1.3 Energy Efficiency Retrofit Revenue by Product and Service Type, World Markets: 2011-2020



(Source: Pike Research)



CHARACTERISTICS OF THE BUILDING STOCK IN EUROPE

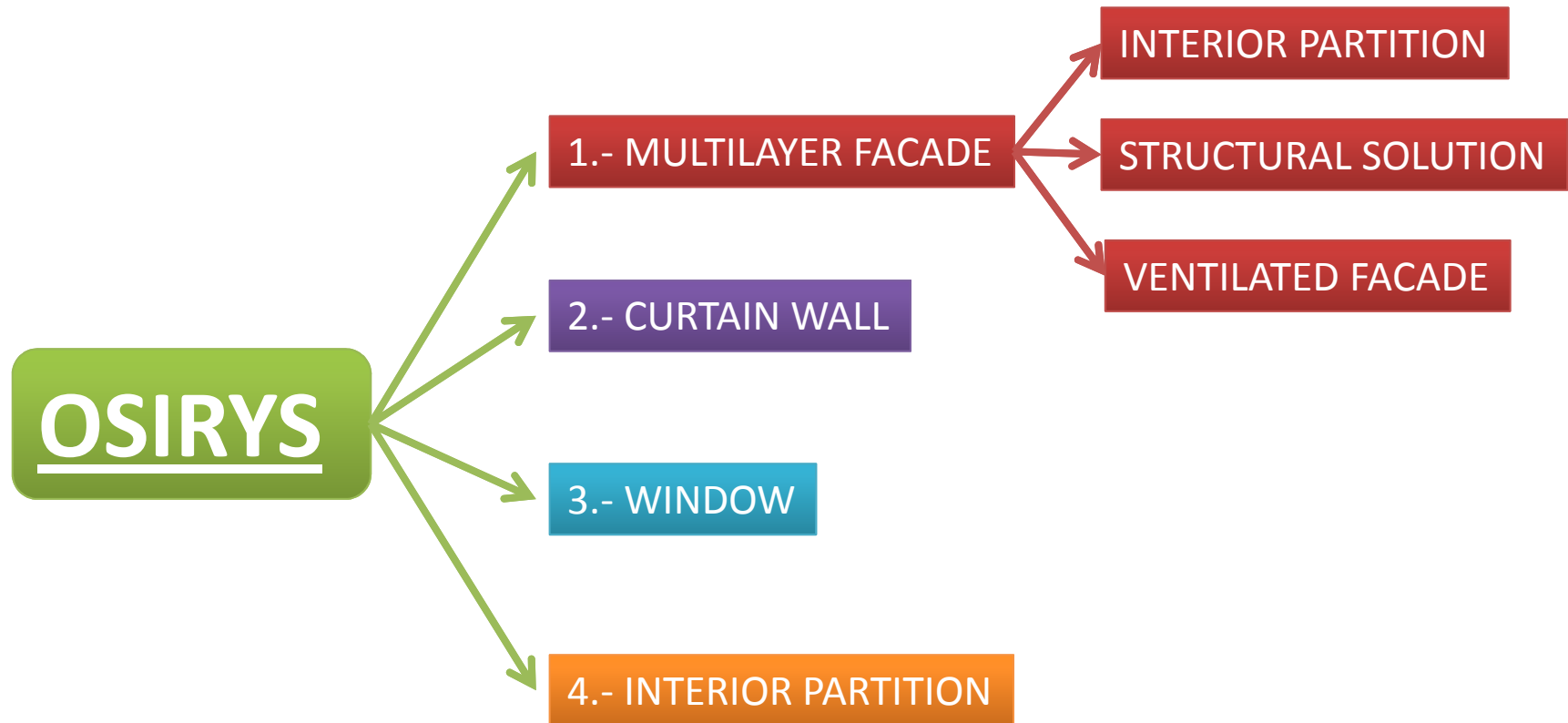


Europe's Buildings Under The Microscope. A country-by-country review of the energy performance of buildings.

- The conclusions extracted from the study are that variations in the age between 3 regions listed above are very small, but buildings before 1960 are more frequent in North and West region.
- All countries experienced a large boom in construction between 1960 and 1990, and specially Estonia, Hungary, Latvia and Finland.
- Countries with recently constructed buildings (between 1990 and 2010) are Ireland, Spain, Poland and Finland.

OSIRYS PRODUCTS



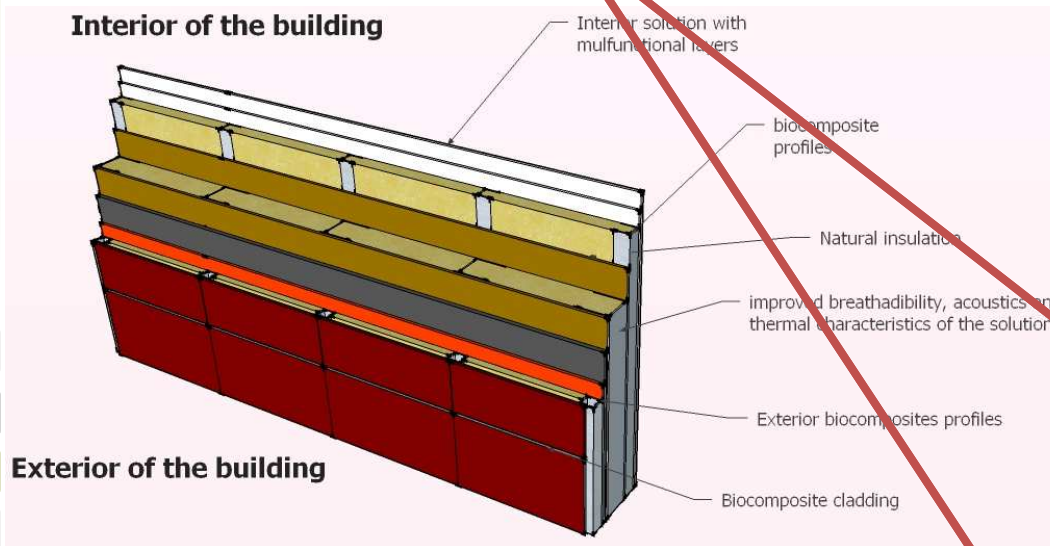


CHARACTERISTICS OF THE DIFFERENT PRODUCTS



CHARACTERISTICS OF THE DIFFERENT PRODUCTS

1.- MULTILAYER FACADE



INTERIOR PARTITION

- Eco-Materials
- Multifunctional layers
 - VOCs elimination
 - Improve indoor air quality

MIDDLE SOLUTION

- Eco-materials
- Breathability solutions
- Natural insulations
- Improved thermal and acoustics properties

VENTILATED FAÇADE

- Eco-materials
- Natural insulations
- Eco-materials with high resistance to the environment

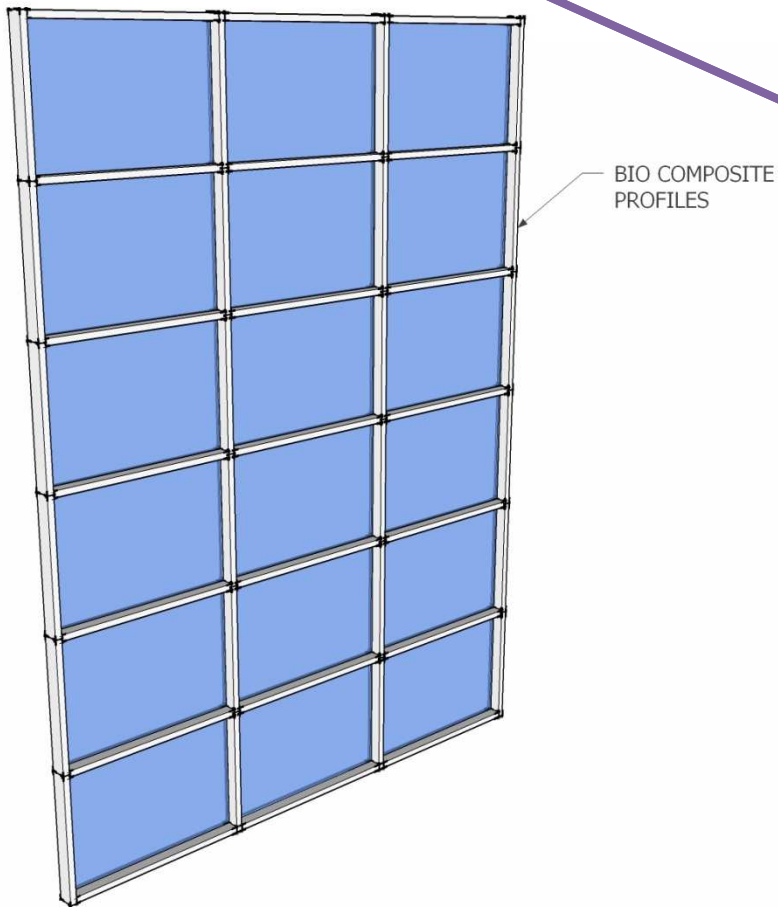
INDUSTRIALIZED SOLUTION

- Better quality
- Reduction of on site works and time
- **Specialized workers**
- **Higher cost**

OSIRYS



2.- Curtain Wall

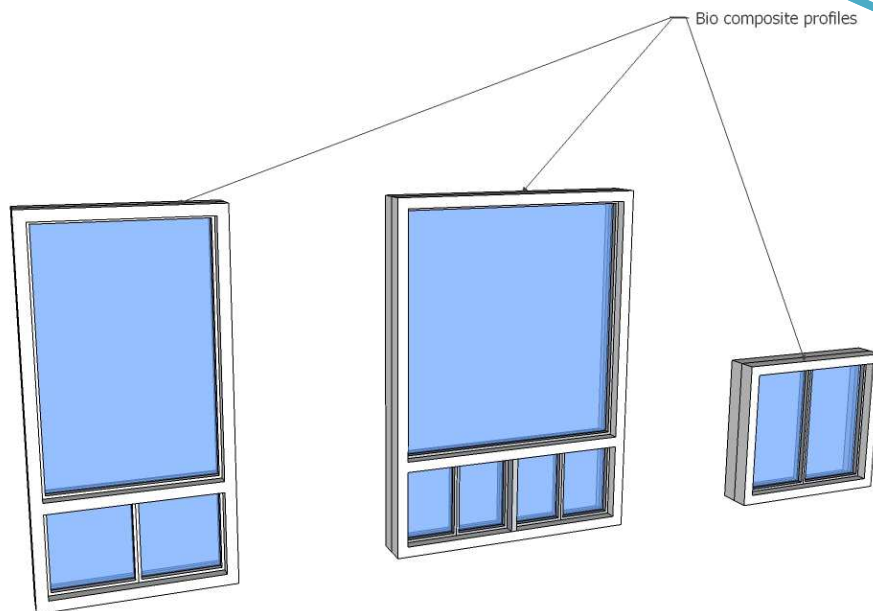


CURTAIN WALL

- Eco-Material
- Excellent thermal insulation
- Resistance to condensation
- Long-lasting
- Immune to pollution
- High degree of water tightness
- Easy to clean
- Minimal maintenance
- Stability as regards colour
- High level of sound insulation

CHARACTERISTICS OF THE DIFFERENT PRODUCTS

3.- Window



WINDOW

- Eco-Material
- Excellent thermal insulation
- Resistance to condensation
- Long-lasting
- Immune to pollution
- High degree of water tightness
- Easy to clean
- Minimal maintenance
- Stability as regards colour
- High level of sound insulation

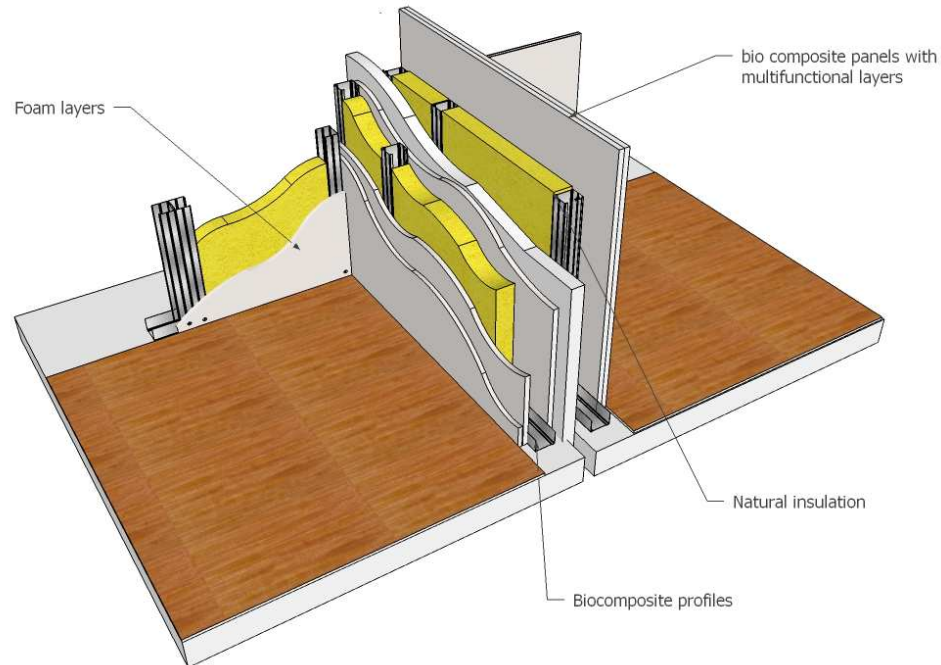
OSIRYS



4.- INTERIOR PARTITION

INTERIOR PARTITION

- Eco-Material
- Excellent thermal insulation
- Multifunctional layers (VOCs elimination)
- Improved interior air quality
- High level of sound insulation
- Foam layers



TARGET TYPOLOGIES OF BUILDINGS



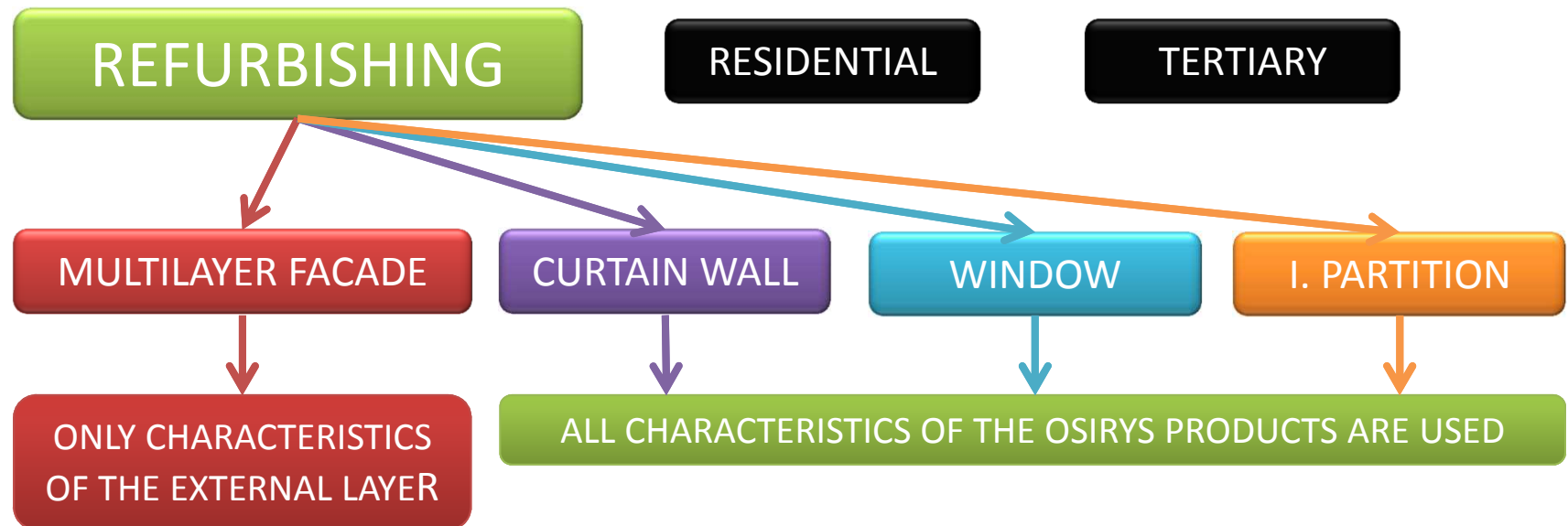
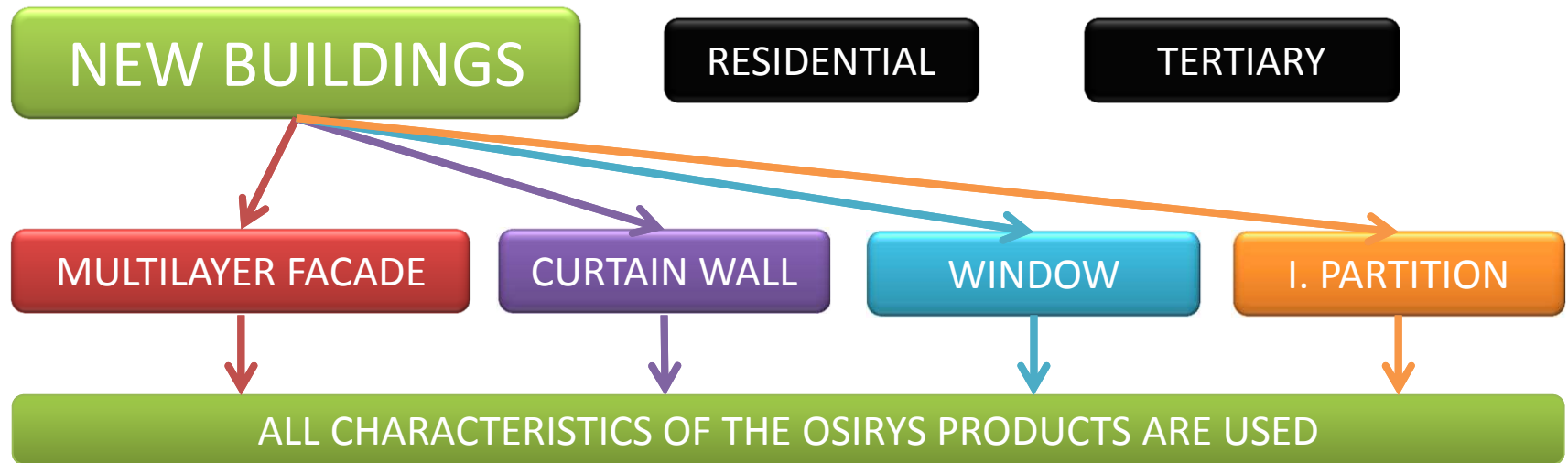
TARGET TYPOLOGIES OF BUILDINGS

	TYPLOGIES OF PRODUCTS USED	OSIRYS SOLUTIONS
RESIDENTIAL	<ul style="list-style-type: none"> • TRADITIONAL FAÇADE • WINDOWS • BRICK WALLS • PLASTER BOARD WALLS • VENTILATED FACADES 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> M. FAÇADE <input checked="" type="checkbox"/> Window <input checked="" type="checkbox"/> M. FAÇ.-I.Part. <input checked="" type="checkbox"/> I. Partition <input checked="" type="checkbox"/> M. FAÇADE
TERTIARY	<ul style="list-style-type: none"> • CURTAIN WALLS • TRADITIONAL FAÇADES • WINDOWS • BRICK WALLS • PLASTER BOARD WALLS • VENTILATED FACADES 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> Curtain Wall <input checked="" type="checkbox"/> M. FAÇADE <input checked="" type="checkbox"/> Windows <input checked="" type="checkbox"/> M. FAÇ.-I.Part. <input checked="" type="checkbox"/> I.Partition <input checked="" type="checkbox"/> M. FAÇADE
INDUSTRIAL	<ul style="list-style-type: none"> • CONCRETE SYSTEMS • METAL FACADES • SANDWICH PANELS 	<ul style="list-style-type: none"> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/>

TYOLOGIES OF CONSTRUCTION



TYPOLOGIES OF CONSTRUCTION



Thank you for your attention

