

TEPPFA / PPG Conference Edinburgh March 2005

Hot & Cold Water Pipe Systems - Europe

Ewan Green - AMI Consulting

“Some like it Hot”

Applied Market Information

- Established 1986, Bristol based plastics consultancy
- Employ 26 at two offices in Bristol UK and one in Wyomissing, USA.
- Offer global research services including:
 - Strategic Consultancy
 - Private Client Research
 - Image Studies
 - Conferences and Seminars
 - Industry Guides
 - Retained Consultancy
 - Multi Client Research
 - Mergers and Acquisition
 - Comprehensive Data Bases
 - Technical Publications

AMI in Construction

- **Through the acquisition of the Building Products Division of Corporate Development Consultants (CDC), a regular suite of European multi client studies covering:**
 - **Pressure Pipe Systems** May 2003
 - **Gravity Pipe Systems** April 2004
 - **Hot & Cold Water Systems** Dec.2004
 - **Industrial Process Pipes** 1998
 - **Roofing Membranes** April 2005
 - **Geomembranes** Early 2006
- **Several construction related publications and guides**
- **Established organisers of global industry conferences – Köln, Vienna, Bangkok, Florida, New Orleans**

Geographic Scope

19 European Countries as follows:

Germany Spain	France Netherlands	UK	Italy
Poland	Hungary	Czech Rep.	Slovakia
Belgium Portugal	Austria	Switzerland	Ireland
Sweden	Denmark	Finland	Norway

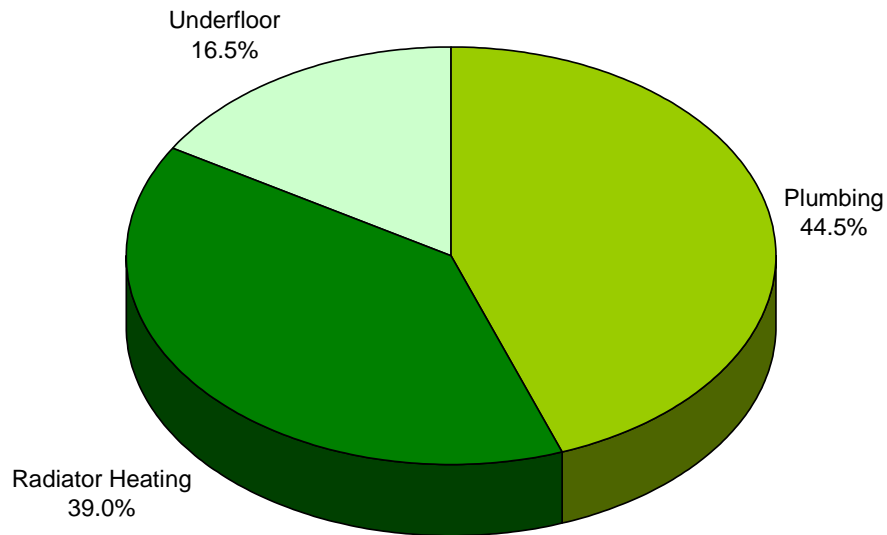
Some Hot & Cold Figures - 2004

- Total pipes market – 1.6 billion metres
- Growth to 2007 – 0.9% per annum

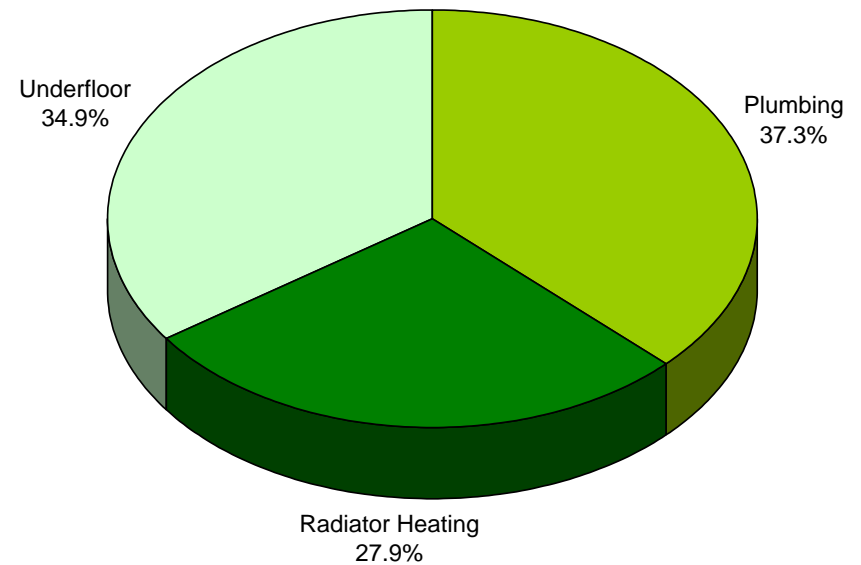
- Total plastics pipes market:
 - 741 million metres
 - 91,000 tonnes
- Growth to 2007 – 4.1% per annum

The Markets

All Markets



Plastics only

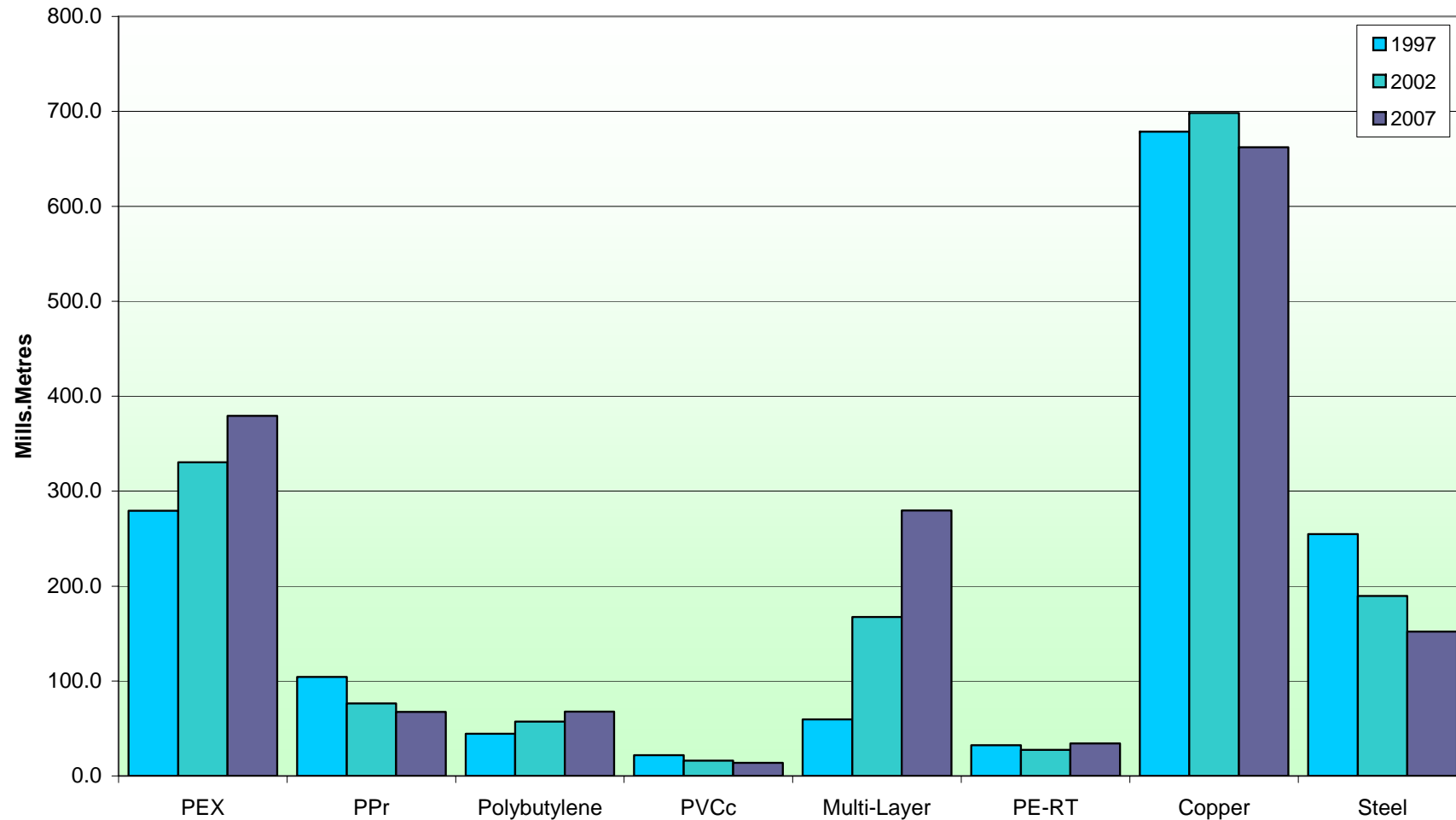


The Materials

Copper
Steel

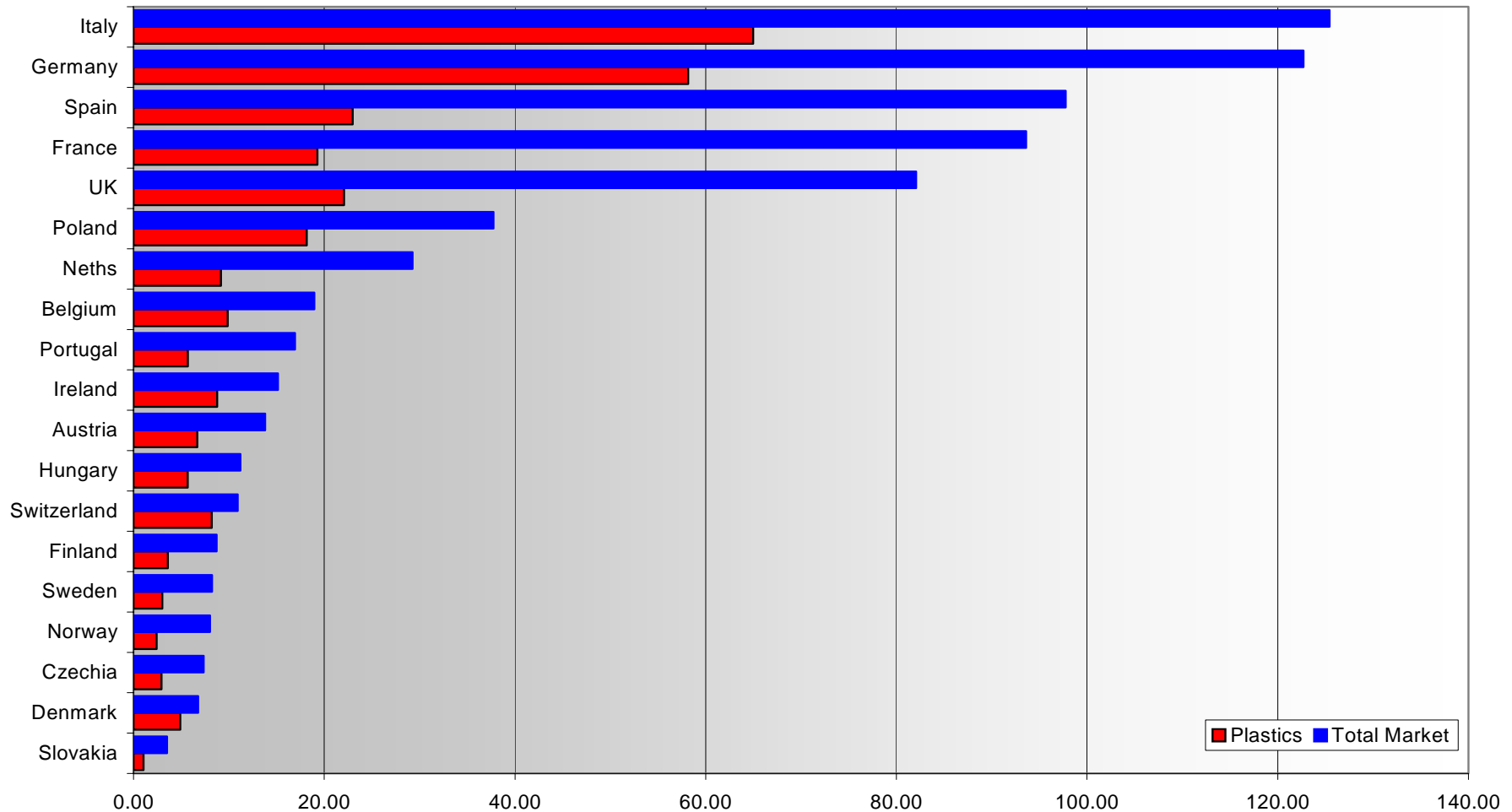
PEX
Multi-Layer Composites
Polypropylene
Polybutylene
PVCc
PE-RT

Materials Evolution



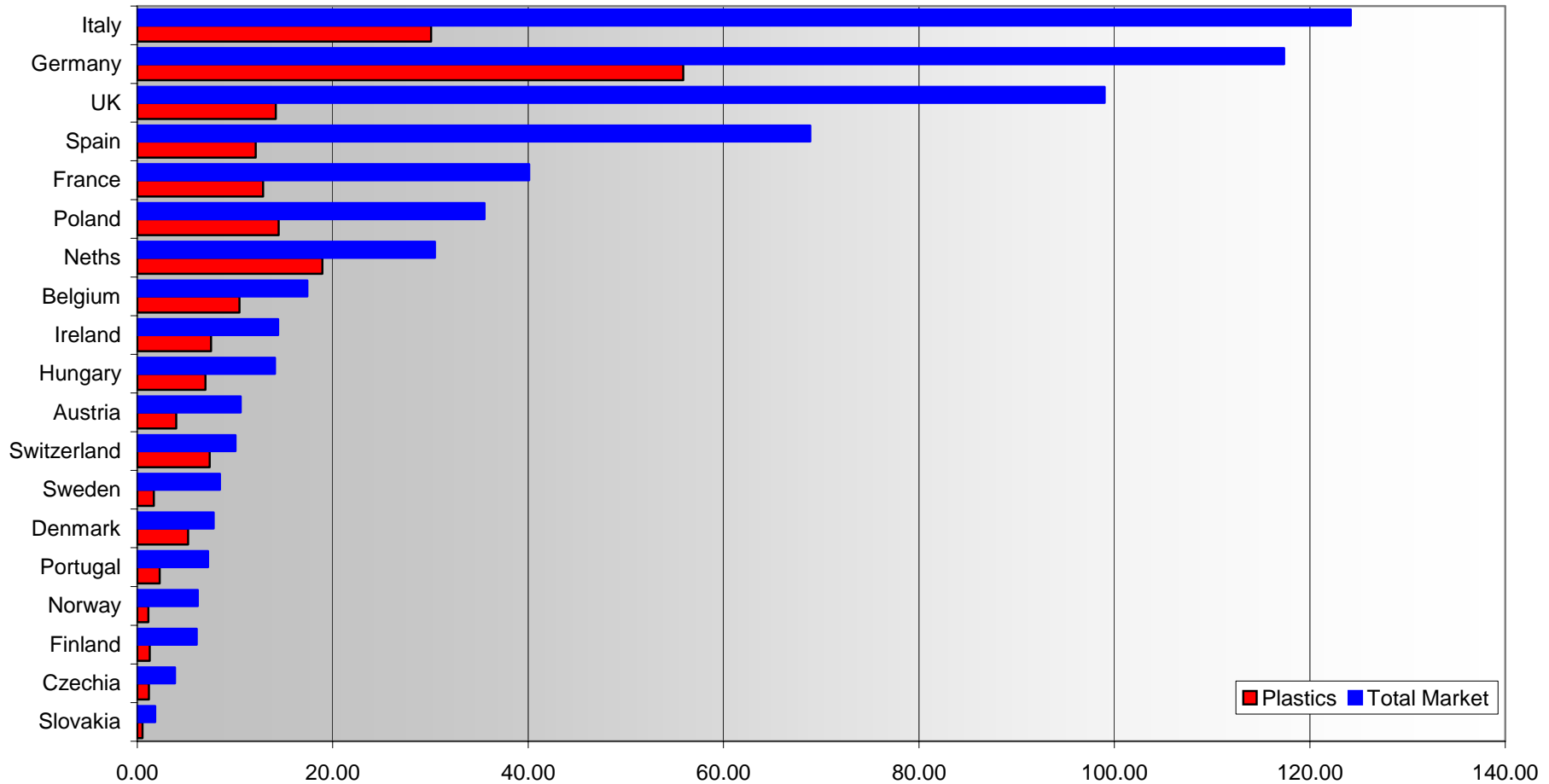
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Plumbing - Market Penetration



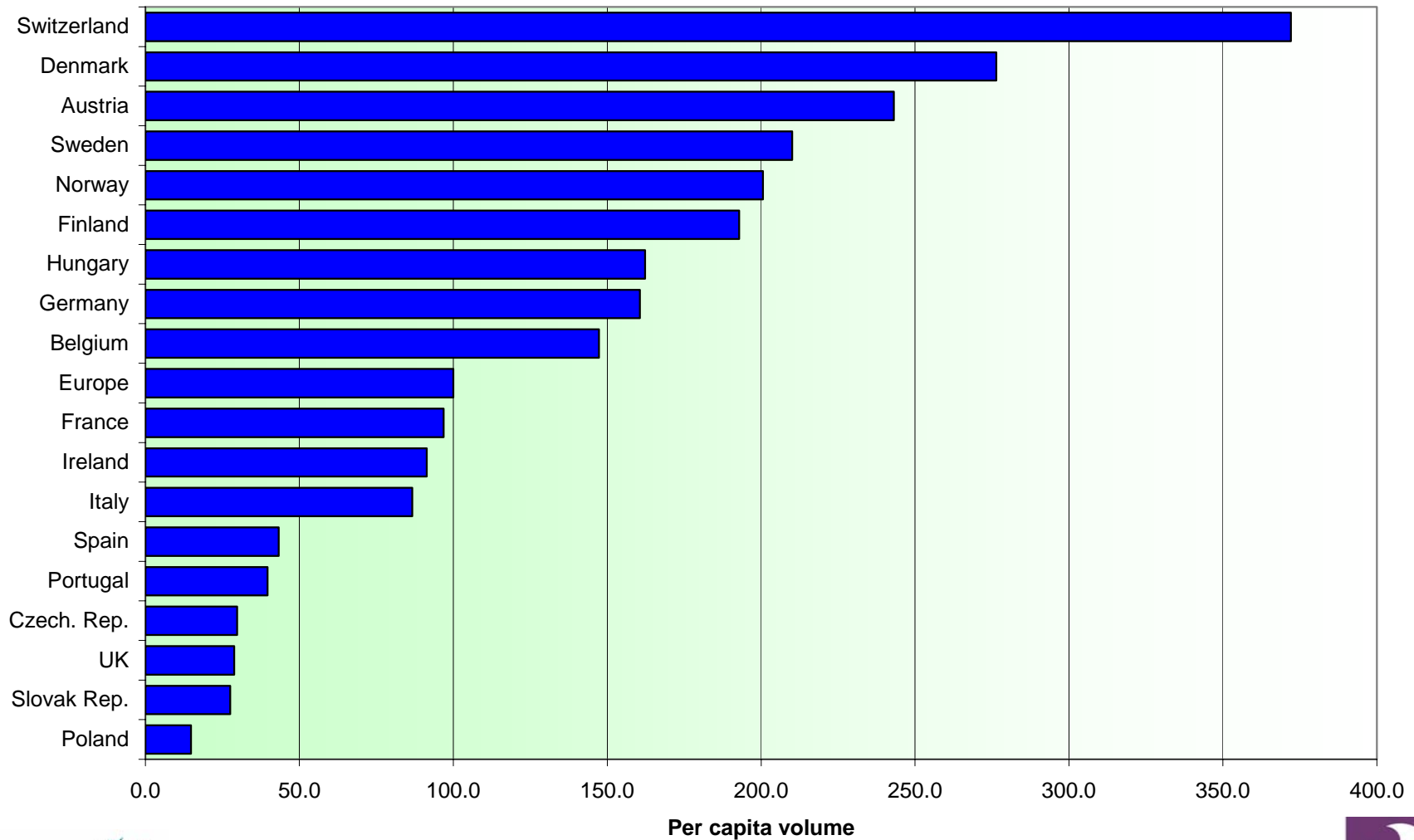
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Radiator Heating - Market Penetration



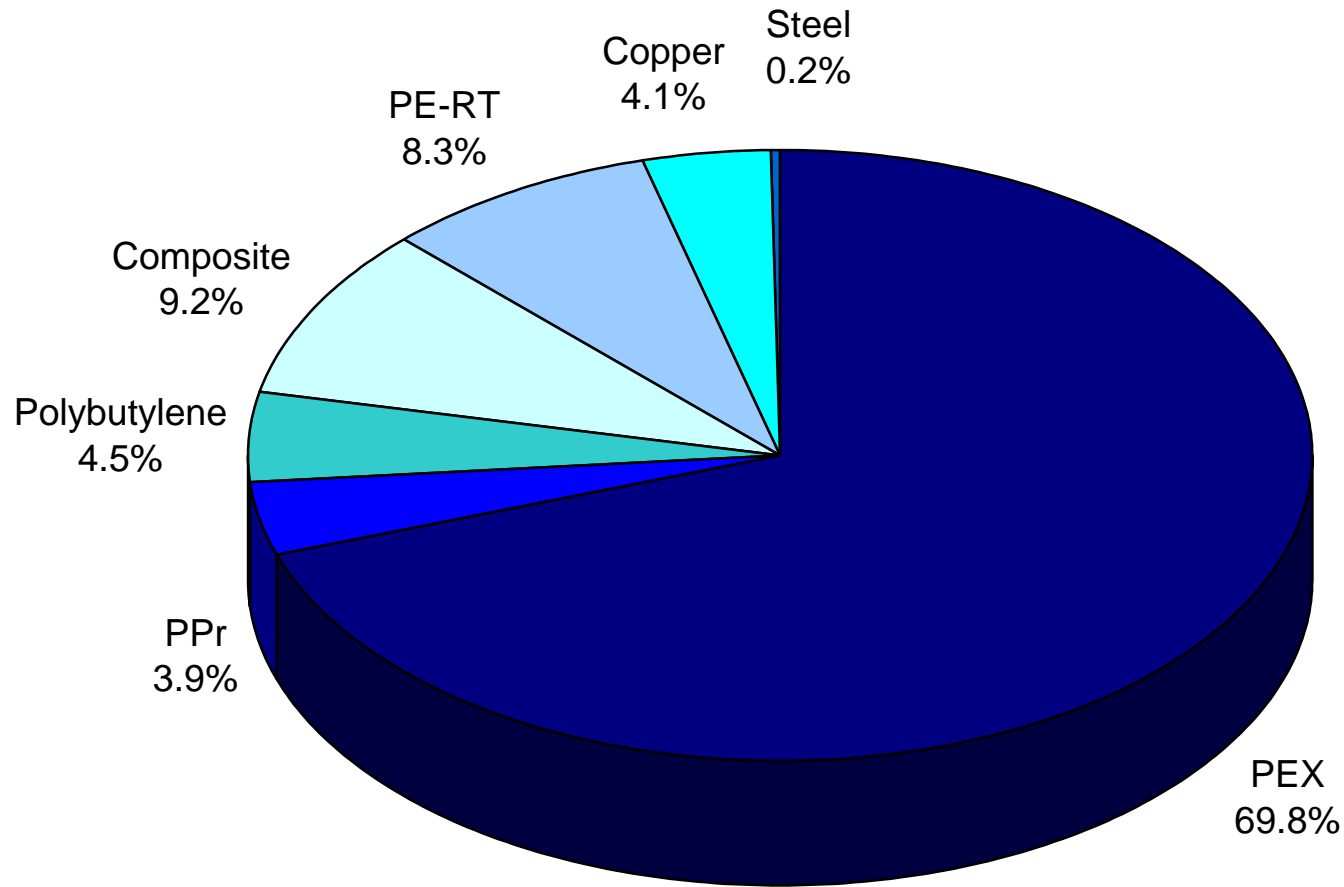
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Underfloor Heating - Index of Per Capita Volume



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Underfloor Heating – Materials



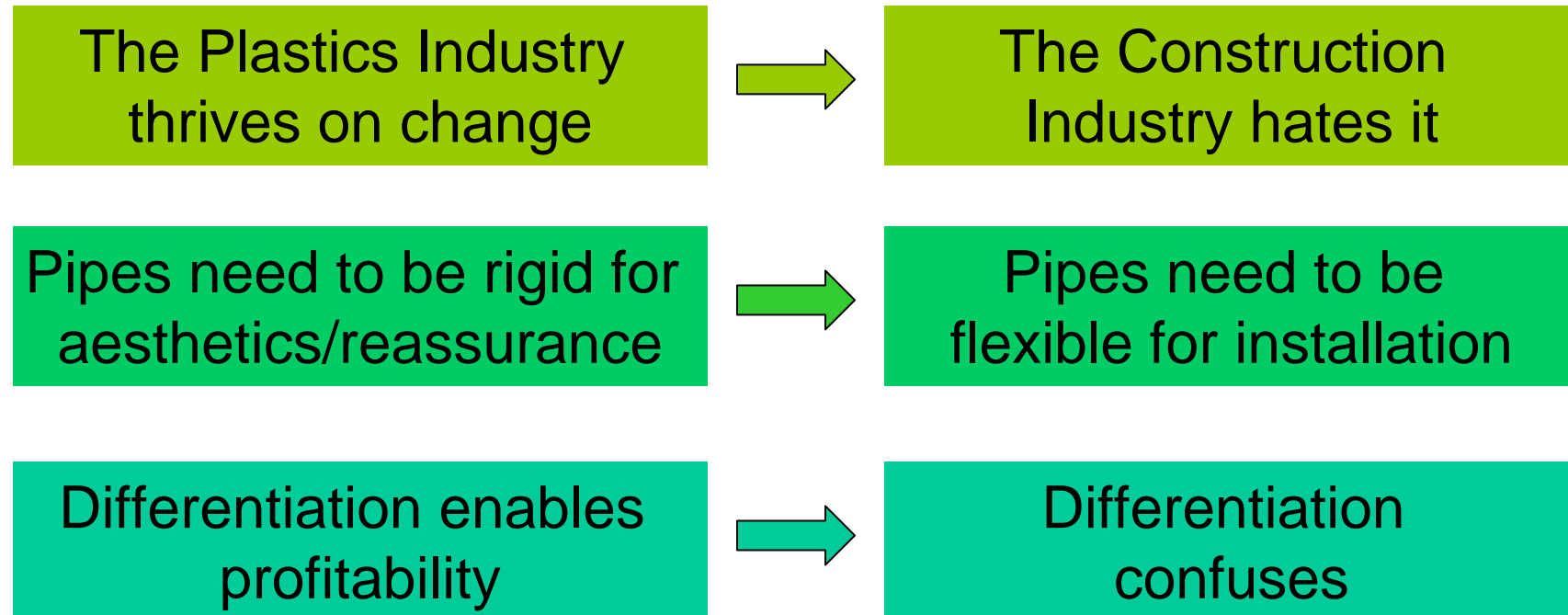
Success Drivers - Plastics

- Ease of Installation – especially with press fit jointing
- Speed of installation – more jobs, more money
- No risk of corrosion
- Clean to work with
- Skills/training needs far less

Barriers to Progress

- Local supply traditions (good & bad !):
 - Copper – UK, France, Germany, Finland
 - Steel - Finland, Slovakia, Portugal
- Familiarity – especially amongst older generation
- Routes to market
 - Copper pipes are commodity items – available through specialists, merchants & DIY.
 - Plastics systems less familiar – distribution control
- Too many options ? “Everyone understands copper”
- Skill is chargeable– more profit in copper ?

Dilemmas



More Dilemmas

The Plastics Industry
wants market share



Volume leads to
commodity pricing

Plastics systems make
Installation easy



Installers want to
show their skills
and profit from them

Problems ?

- Copper & Steel lobbies concentrated, united and focused
- Plastics industry continues to fight against itself:
 - 6 competing materials options, with many variations
 - 28 PEX pipe extruders PLUS systems companies
 - 15 multi-layer composite pipe producers PLUS systems companies
 - 15 PPr pipe extruders PLUS the Turkish
- Threat of low cost imports to price stability

The Challenges

- To advance market share in plumbing and radiator heating - continue winning over installers
- To assist in the promotion of underfloor heating as a concept
- To secure volume with profitability
- To avoid failures – they are costly
- To balance the skill and job satisfaction of the installer with easy installation
- To remain aware of opportunities and threats - ecological issues, drinking water legislation etc

The Prize – Plumbing & Radiator Heating

Subst. Rate	Tonnage Potential*		
	Copper	Steel	Total
5%	4,476	1,117	5,593
10%	8,952	2,233	11,185
20%	17,904	4,467	22,370
50%	26,855	11,167	38,022

* calculated at multi-layer composite weights

The Prize – Underfloor Heating

Market Expansion	Tonnage Potential
10%	2,539
20%	5,078
50%	12,695
100%	25,389

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