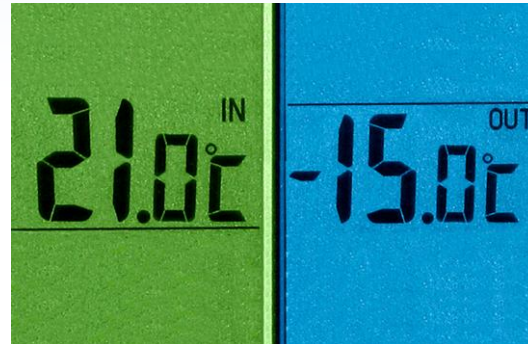


# Malmö seminar 24. Nov. 2010



# Malmö seminar.

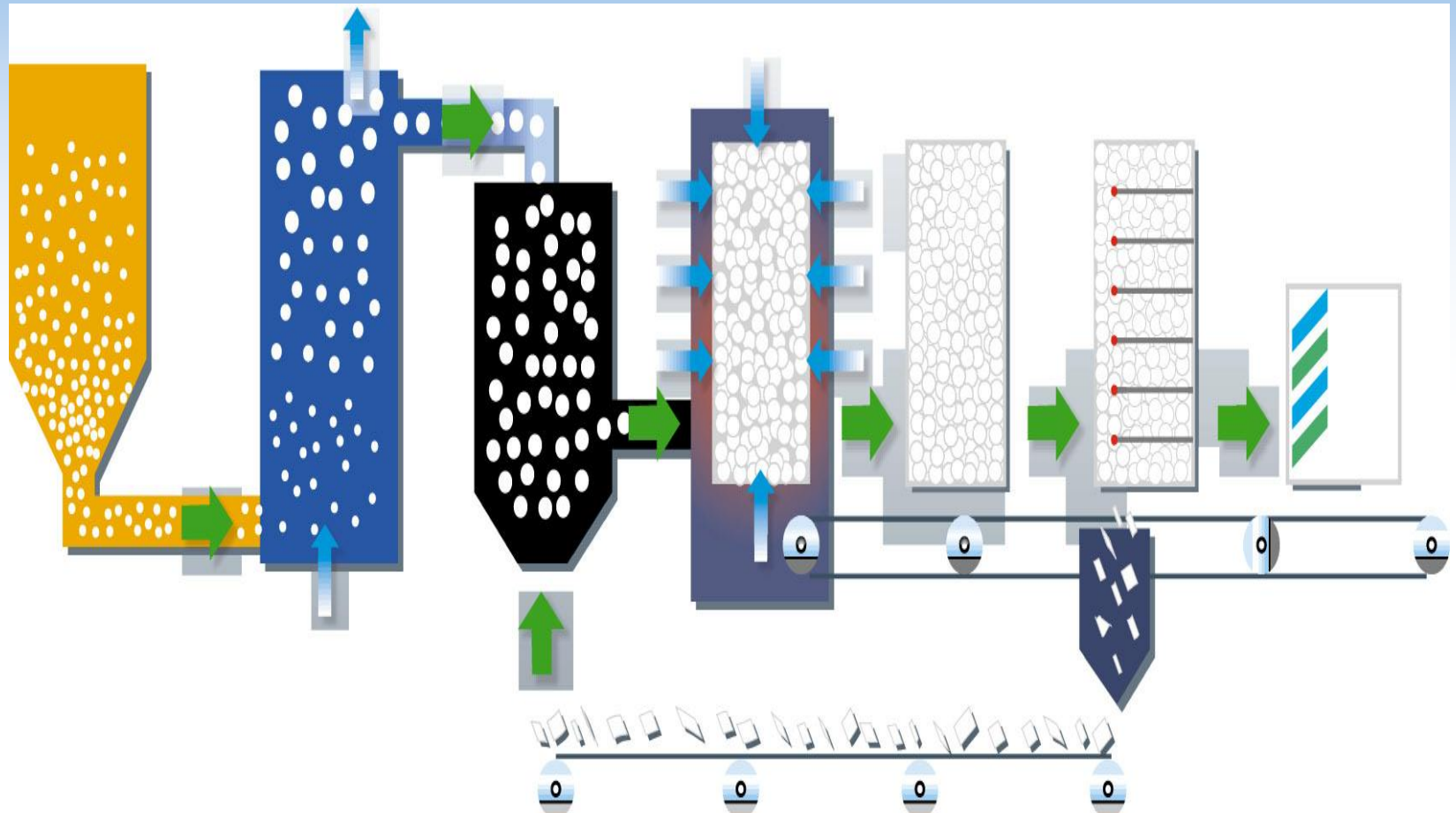
## \* Agenda

- Who, what and where is ThermiSol.
- How is ThermiSol made.
- LCA balance.
- Products and constructions.
- Quistions??

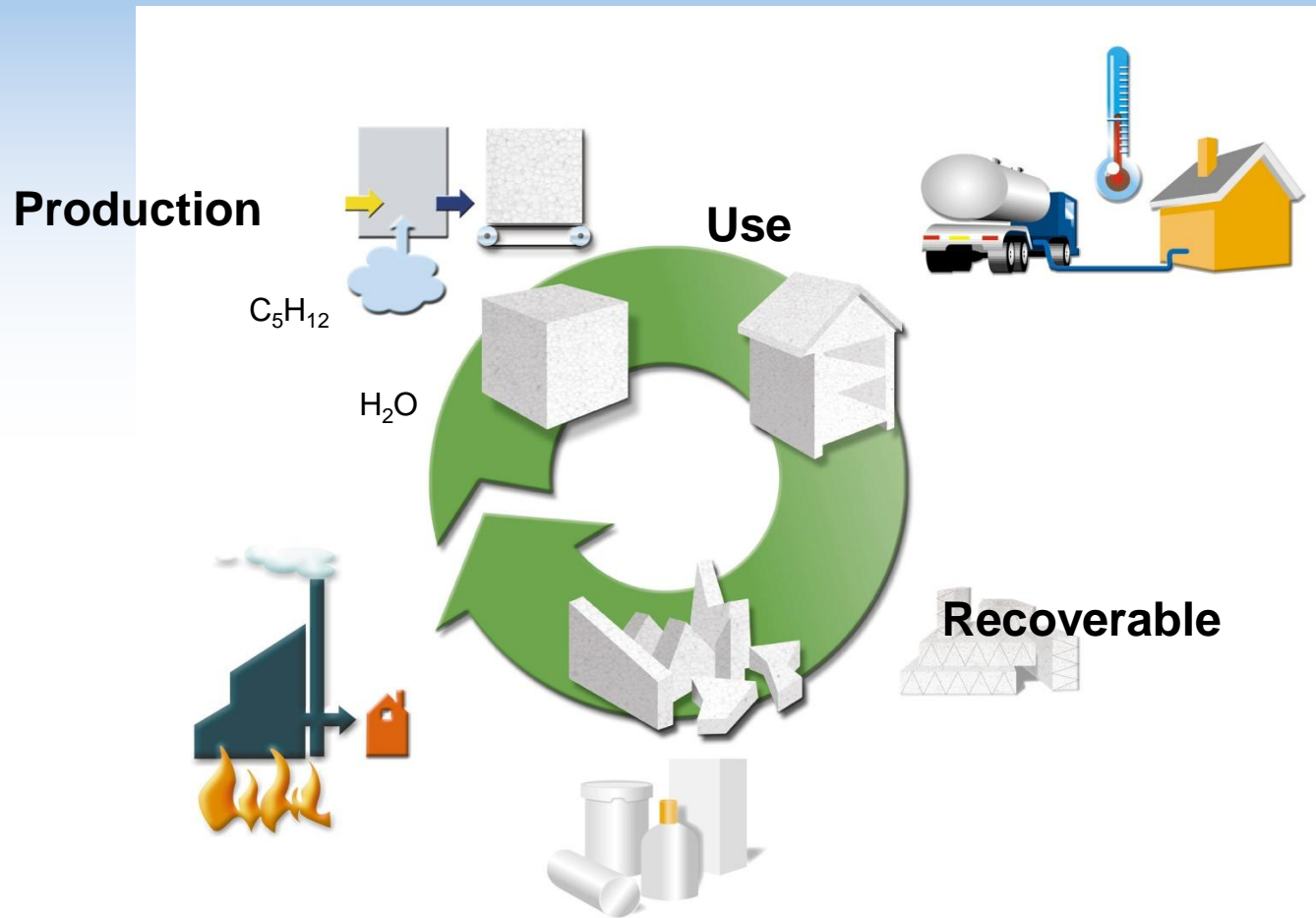
# EPS insulation

- \* EPS insulation is composed of 2% polystyrene and 98% air.
- \* Excellent lambda value.
- \* High compressive strength.
- \* Low water uptake.
- \* Not degraded by moisture, fungi, parasites or bacteria.
- \* Releases no toxic fumes.

# Production proces



# EPS and the environment.



# Contributing to a sustainable environment with EPS

- \* Using EPS insulation actively contributes to a better environment during the entire working life cycle of the building. EPS offers substantial environmental advantages through energy saving and greenhouse gas emission reduction and is therefore ideally suited to the creation of environment-friendly new building projects.

# Contributing to a sustainable environment with EPS

It is easy to handle, safe, non-hazardous and has proven constant mechanical and insulation properties for the life time of the building in which it is used. EPS doesn't contain or use any ozone depleting chemicals at any stage of its life cycle

# Contributing to a sustainable environment with EPS

At every stage of its life cycle, from manufacture, to application, to recycling and final disposal of EPS, it offers exceptional eco-credentials.

All manufacturing processes comply with current environmental regulation.



# Energy consumption

- \* Energy to produce EPS: 4,8 MJ/kg
- \* Energy stored in the product: 40 MJ/kg
- \* For 1 kg. EPS is 200 kg. fuel oil saved
  
- \* The stored energy will be released when it is burnt in a Heating plant. Only CO<sub>2</sub> and steam is emitted.

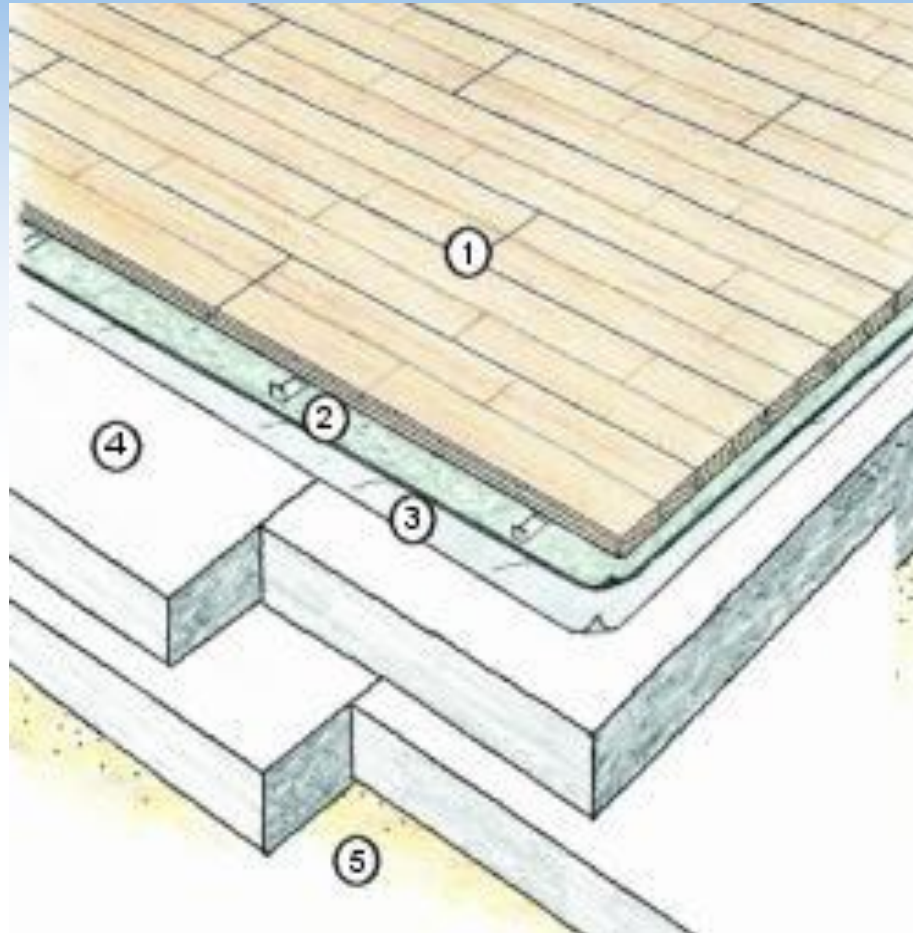
# Applications

- \* Floors.
- \* Flat roofs.
- \* Roof-elements.
- \* Foundation (drainage)
- \* Cavity walls.
- \* Etics.
- \* Civil engineering.

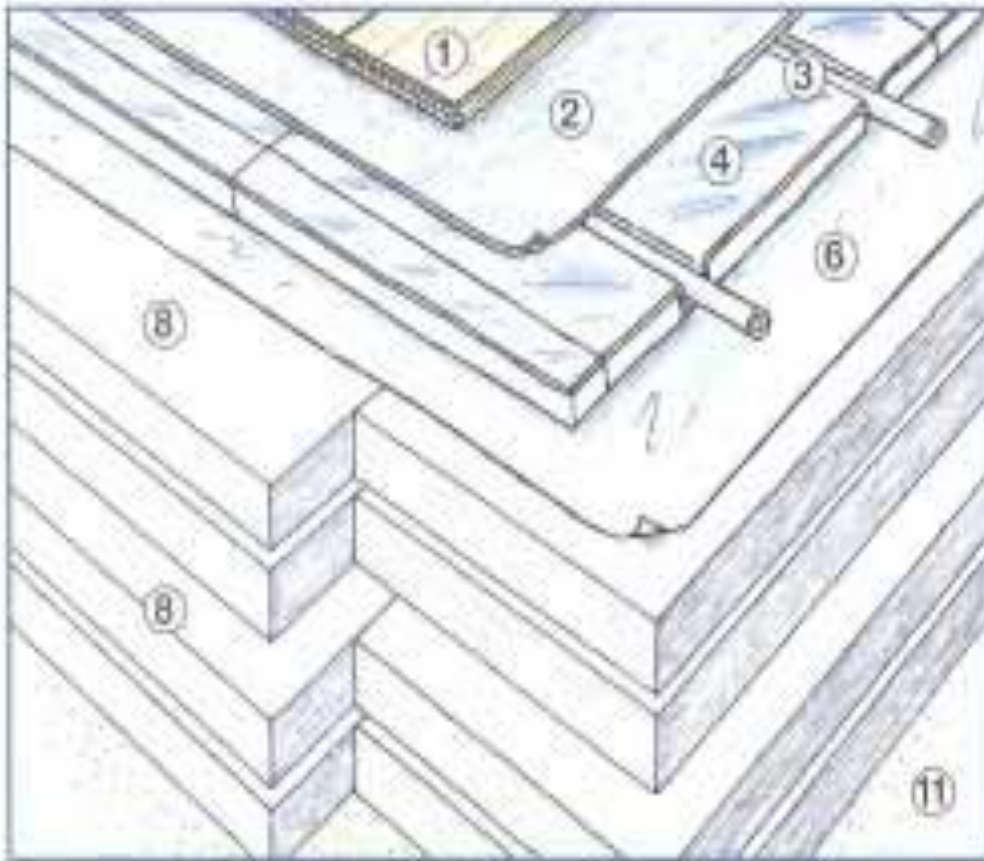
# EPS thickness/U-value

U-value		<b>0,15</b>	<b>0,12</b>	<b>0,10</b>	<b>0,09</b>	<b>0,08</b>
R-value		6,48	8,04	9,58	10,59	11,85
Floor	G60	215	300	340	385	0
	G80	210	260	320	355	405
	G150	190	245	300	340	385
	G250	180	235	285	320	365
	Platina 80	160	210	255	285	320

# PolyGulv (min. EPS 150)

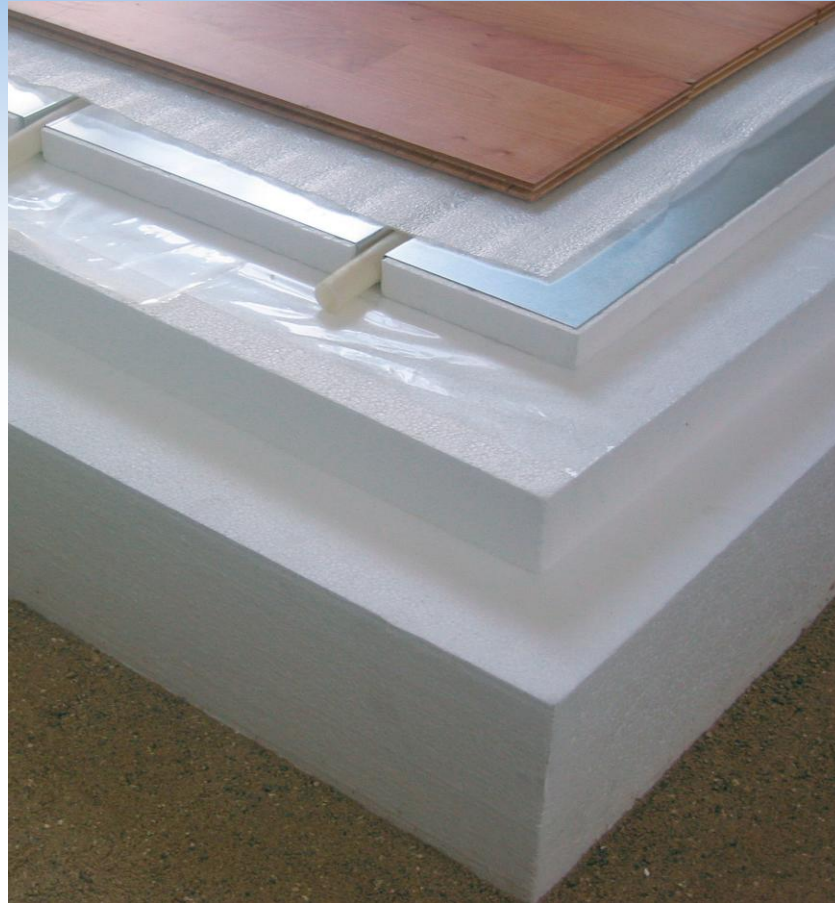


# Warm Floating floor.



- 1) Wood
- 2) 2 mm Step insulation
- 3) 20 mm heat pipes
- 4) 25 mm ThermiSol heat floor
- 6) Moisture barrier
- 8) ThermiSol EPS 150
- 11) Compact

# Warm floating floor.



# ThermiSol PoliTerm Blu

	200	250	300	350
Lambda W/mK	0,065	0,067	0,080	0,103
Compressive strength MN/m <sup>2</sup>	0,69	0,83	1,48	1,69
Density Kg/m <sup>3</sup>	215	265	315	365
Fire class	A2,S1-d0	A2,S1-d0	A2,S1-d0	A2,S1-d0

# Pumping EPS-concrete.





# Renovation.



# Thanks for now.

- \* And just in conclusion:
- \* Can you insulate too much??
- \* Can you seal your house too much??

**\*No you can't !!!**