

Emerging Technologies and Material Challenges

Brochure

Fig. 1

- **Grid-connected photovoltaic system schematic**

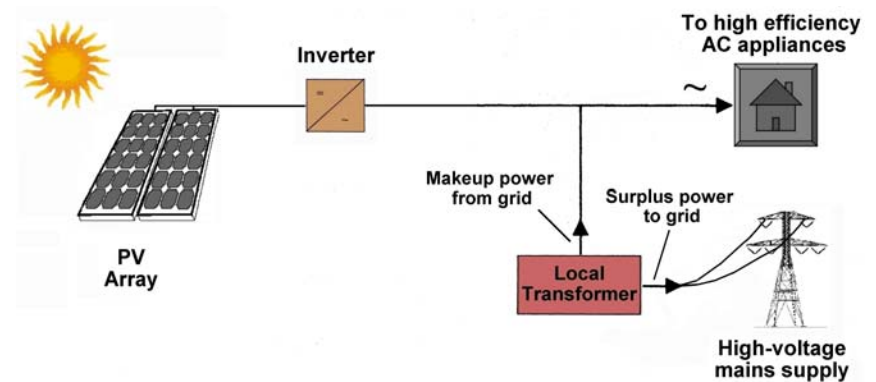


Fig.2

- **HTS cable: warm dielectric cable (left) with conventional insulation and cryogenic dielectric cable (right) with liquid nitrogen insulation**

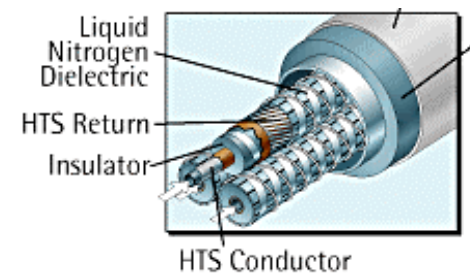
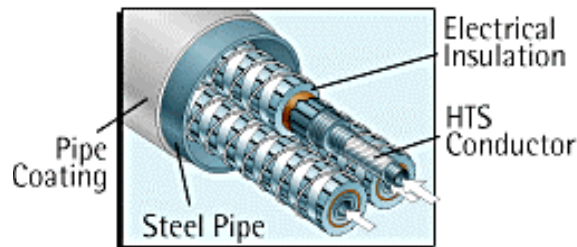


Fig. 3 Examples of advanced material technologies in the field of the EPI

Emerging Material Technologies	Relevant to Cigre Study Committee						
	A1	A2	A3	B1	B2	B3	C4
Polymer composites		X			X	X	
Metallocene polymers	X	X	X	X	X		
Conducting polymers		X	X	X			X
Ceramics	X			X			X
Elastomers			X	X	X		

Fig.4: The three E's of the past, the present and the future

