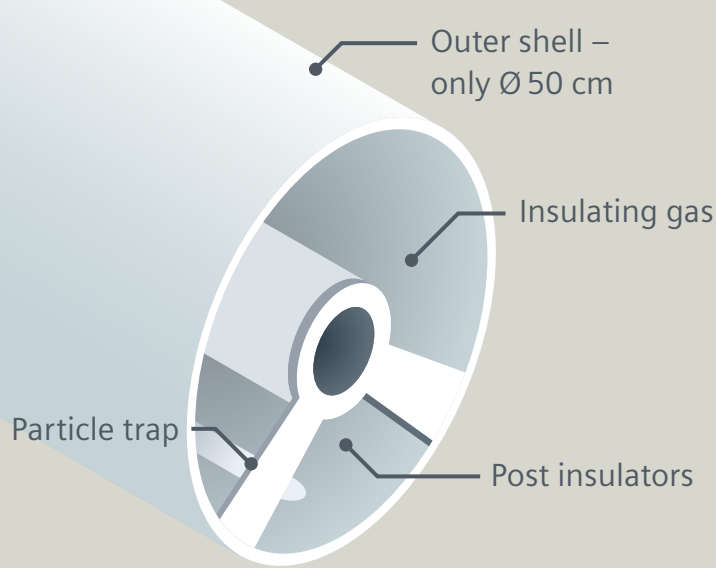
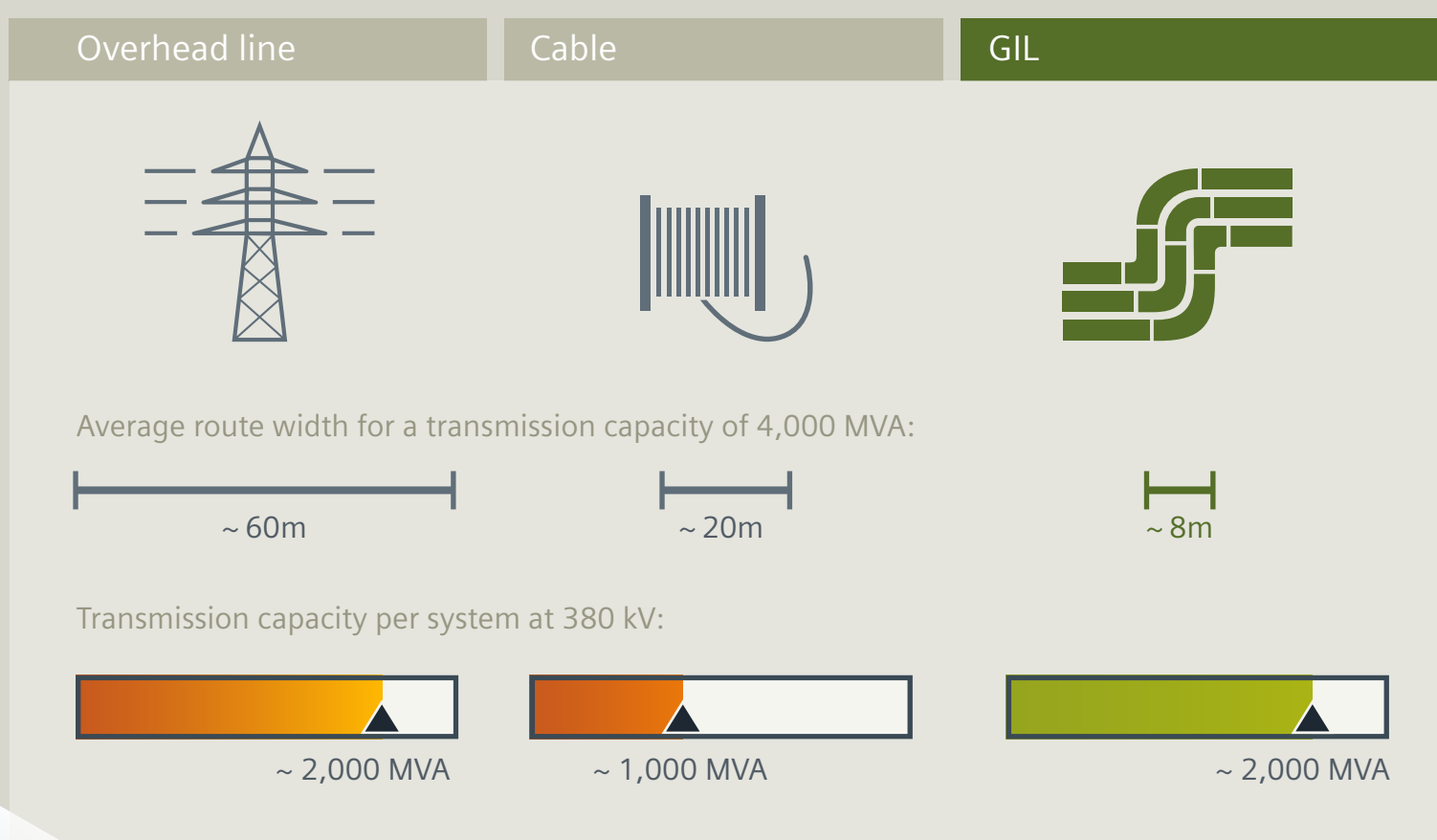


## Gas-insulated lines for AC-transmission

A compact solution for high power transmission

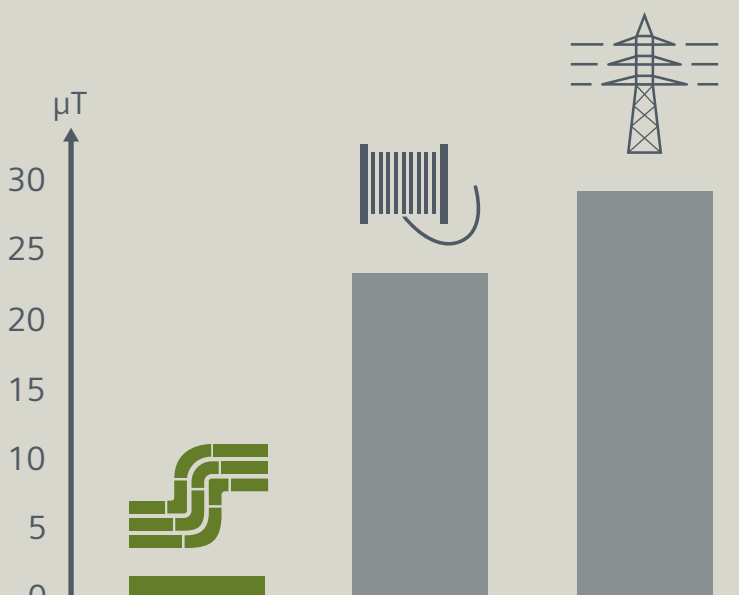
There are many places where pylons are not suitable. In some cases, even the most common substitute, underground cables, also cause problems. Gas-insulated lines (GILs) provide technical, environmental, and operational features that make them a very good alternative wherever the transmission of extra-high voltage and extra-high currents is needed.



- Considerable space savings
- Increased performance
- High electromagnetic compatibility

### Lowest electromagnetic field

With its “line-in-a-can” design that neutralizes inductive current, the AC-GIL generates electromagnetic fields 15 – 20 times lower than conventional cables, even meeting upper limits as low as 1 µT. The magnetic fields at 2000A are shown in the graph.



### GILs come in four different application types:

<p><b>Aboveground</b></p> <p>GILs are largely unaffected by extreme conditions. Particularly high transmission power can be achieved with aboveground installation.</p>	<p><b>Tunnel</b></p> <p>GIL systems installed in a tunnel remain accessible for inspection. They pose no fire risk and allow the tunnel to be used for ventilation purposes at the same time.</p>	<p><b>Direct burial</b></p> <p>For direct burial, GILs are wrapped with polyethylene to safeguard the enclosure, and the soil above can be restored for agricultural use.</p>	<p><b>Vertical</b></p> <p>GILs can run at any gradient, even vertically, making them attractive in cavern hydropower plants.</p>

### Flexible grid connections – optimum grid integration

- Outstanding safety in operation
- Flexibility in routing
- Easy planning with less space required
- Environmental compatibility
- Service life >50 years
- Perfect grid integration