



German Energy Solutions

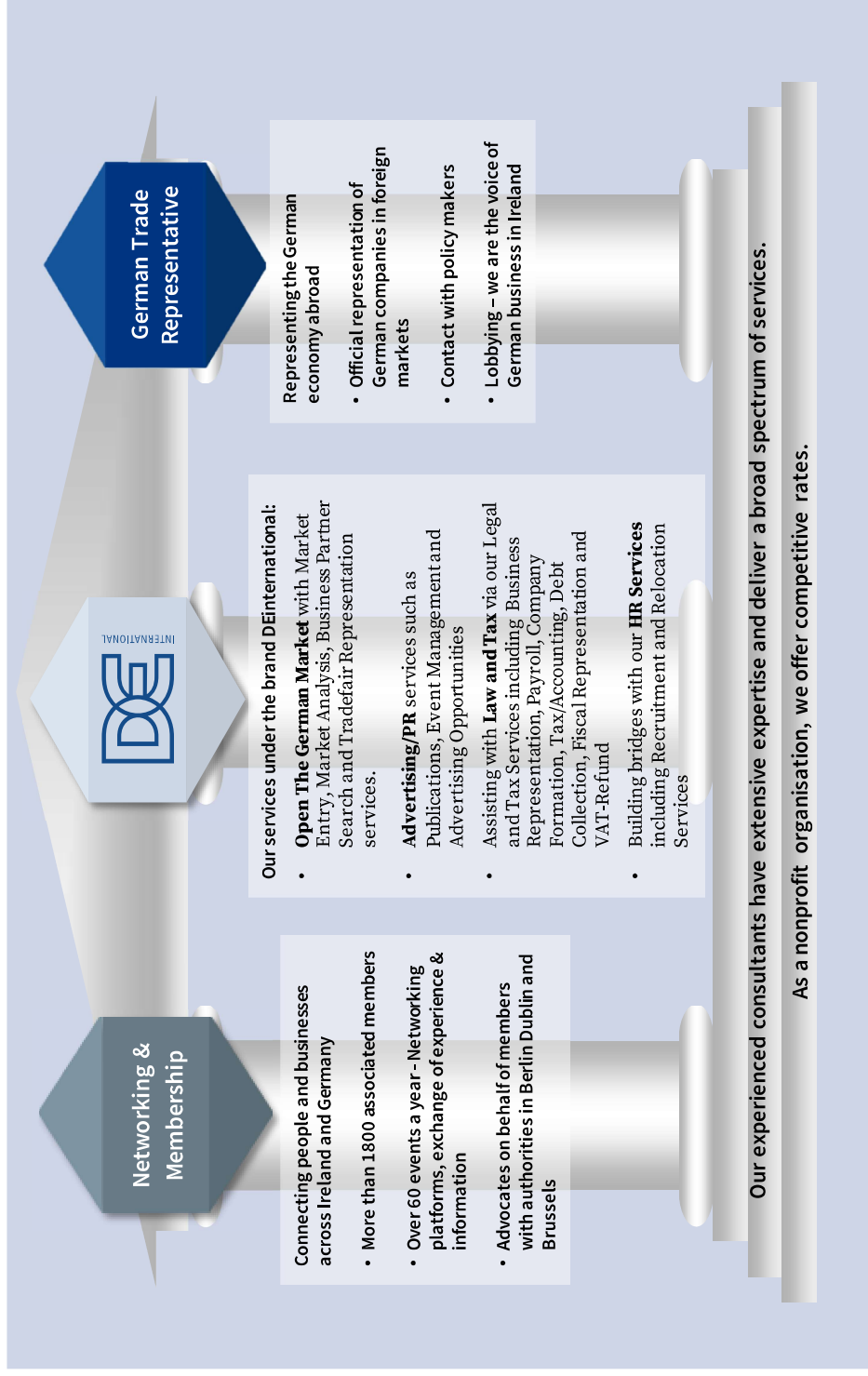
German-Irish Chamber of Industry and Commerce



DRINKS IRELAND 25/4/2022



Our 3 Pillars



**We
open
doors.**

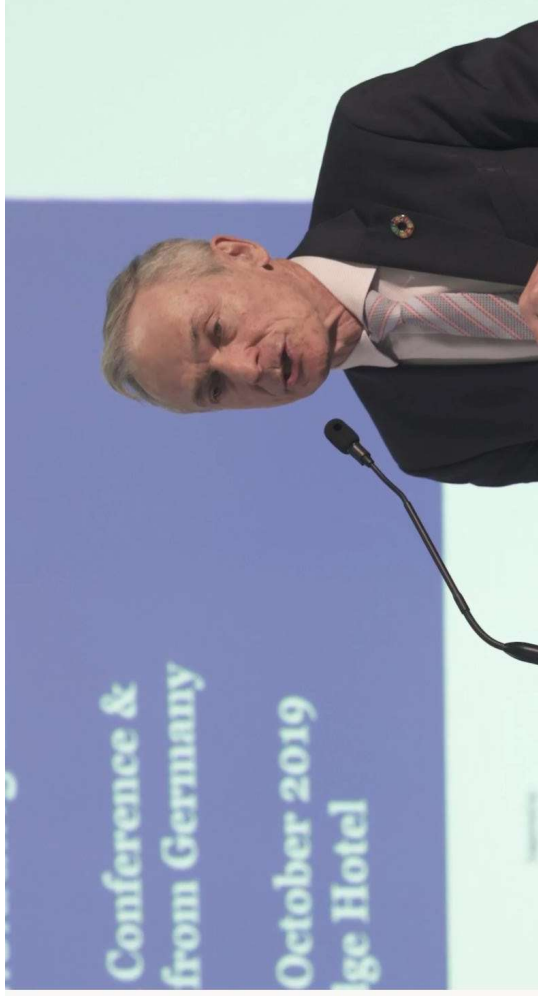


Deutsch-Irische
Industrie- und Handelskammer
German-Irish Chamber
of Industry and Commerce

Energy Export Initiative

Minimum One Annual Energy Related Trade Mission

- 2018 – Energy Efficiency in Buildings
- 2019 – Windenergy
- 2020 – Micro grids
- 2021 – Energy Efficiency in Buildings
- 2022 – Wind Energy (September)
- 2023 - Hydrogen



German Energy Solutions

SuSi SuperSilent Small Windturbine



- For Self Consumer
- DIY Build
- 12V Generator – feed battery and/or inverter
- 2KWp/4KWp/6KWp options or cascades for larger
- Advantage over PV – night time electricity!

<https://www.euro-windpower.eu>

German Energy Solutions

Goldbeck Solar – PV Roofs



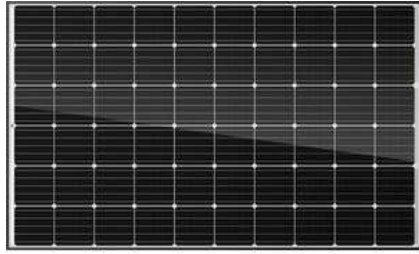
<https://goldbecksolar.com/>



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eVERA's PV EASYTherm



PV

+

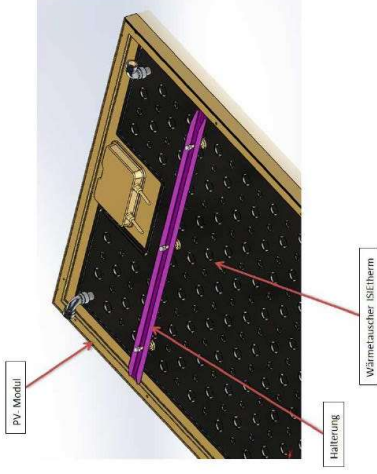


PV-EASYTherm

=



PVT



- Retrofittable to any PV panel
- PV panel now also produces hot water with no loss of performance on the PV panel

<https://www.evera-energy.eu/>

German Energy Solutions

TESVOLT – Battery Storage Solutions



- Low Voltage/Hi Voltage/Containerized Solutions
- For off grid solutions or to optimise self generation (e.g. PV and wind)
- 10KWh to 100MWh

<https://www.tesvolt.com/>

German Energy Solutions

aelectra Electric Underfloor



- Unique carbon composite material
- Can be installed in walls, floors, ceilings
- Plaster over or beneath flooring
- 24V/36V
- 60/110/220 W/m²
- Rapid response
- Office heating coupled with wind or PV

<http://www.aelectra.de/>

German Energy Solutions

Combined Heat & Power



- Two energy streams from the one generator
- As gas grid greens, so does the energy output
- LPG option as well
- Water outlet temperature 80 to 90°C

German Energy Solutions

SenerTec



5.5KWe "Dachs"

<https://senertec.com/>

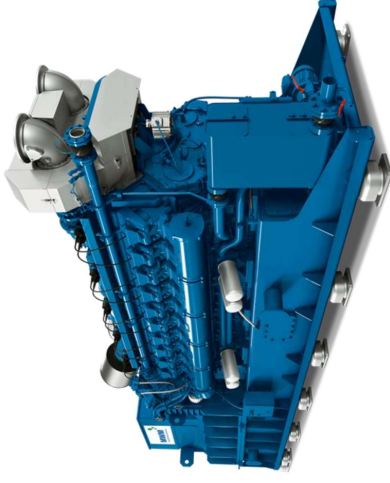
2G



20KWe – 2000KWe

<https://www.2-g.com/>

MWM



400KWe – 10,300KWe

<https://www.mwm.net/en/>

German Energy Solutions

CHP in Breweries – Case Studies



- “G-Box50” 50KWe/85KWt
- Coupled with Absorption chiller
- 135 Tonnes CO2 savings p.a.
- 400,000KWh annual energy savings



- 2,000 KWe/1,977KWt
- 25% reduction in purchased electricity
- Process heat



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Powerscourt Distillery



- Use of a Hot Water Heat Pump
- Extract heat from the still room
- Cooled air can be used to reduce temperature of the still room
- 60°C water
- High COP's achievable

German Energy Solutions

Wilo – VSD Pumps



<https://wilo.com/ie/en/>

German-Irish Hydrogen Council



Why the Council?

- In 2030 German demand for hydrogen will be so large that they cannot produce enough domestically
 - Steel Industry
 - Chemical Industry
- Ireland's renewable resources are so vast we should aim to export
- Irish developers keen to form closer relationships with German industry

Why Hydrogen?

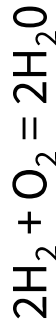
- When you burn methane (or any hydrocarbon) you create CO₂



- 2H₂O + Renewable Electricity = [Green] 2H₂ + 2O₂

- A Clean Carbon Free Alternative to Natural Gas

- But when you burn Hydrogen, you create water!



Forthcoming Trade Missions

Trade Mission - Food Processing and Packaging Machines

- 20 to 23 June

Onshore/Offshore Wind including Maintenance

- 5th to 8th September

Further information: <https://www.german-irish.ie/en/events>

Thank you for your attention!

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