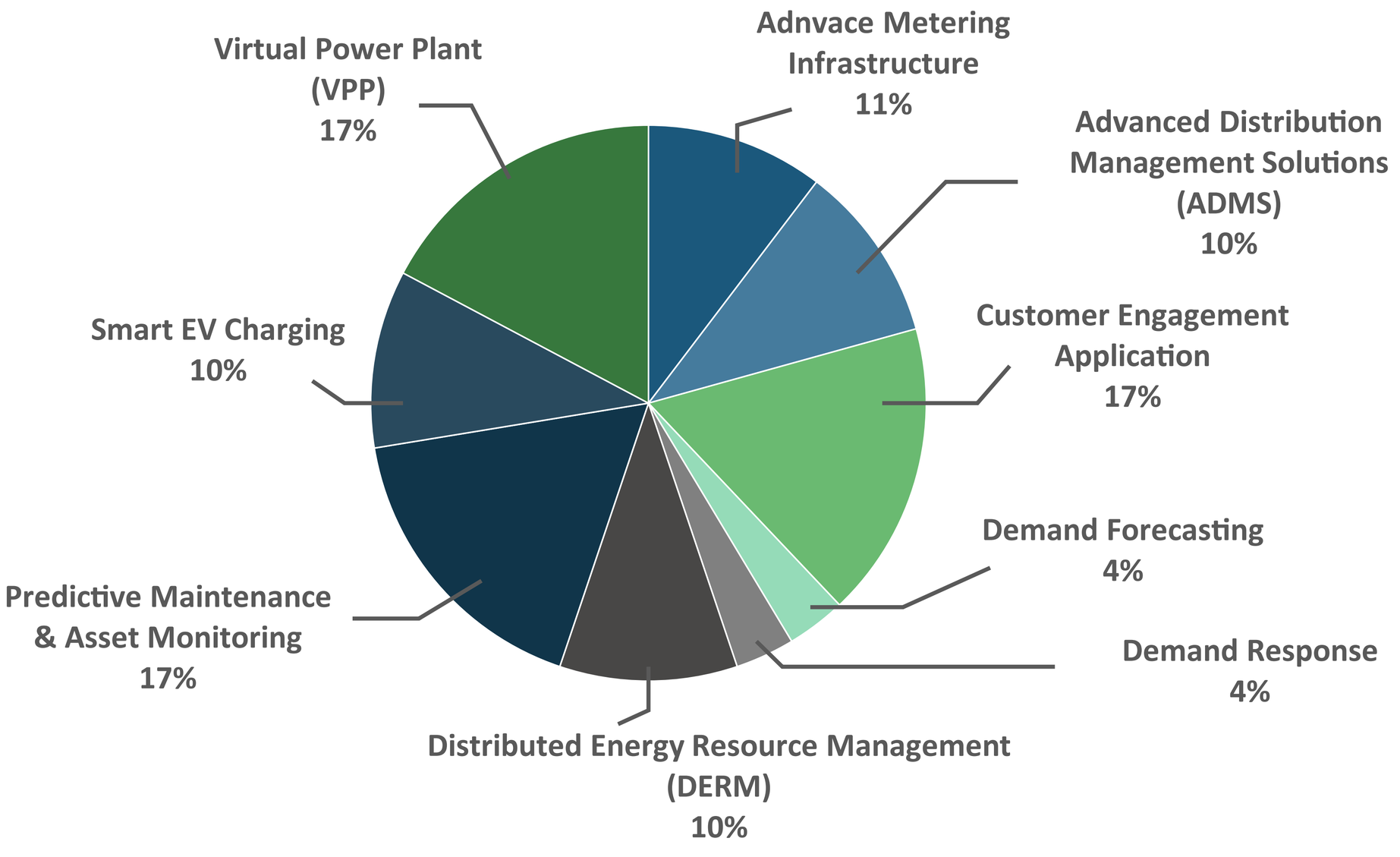
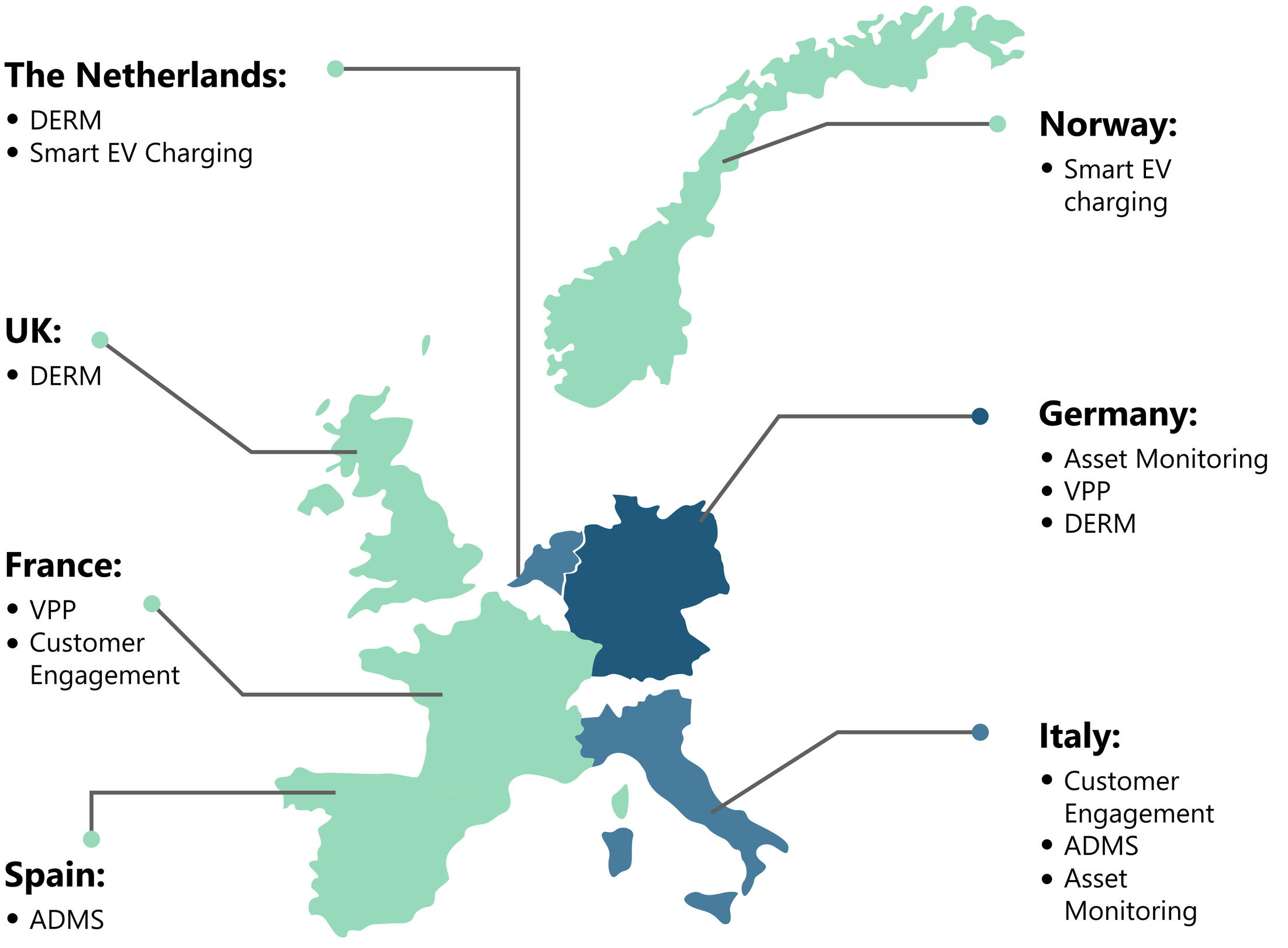
The Future of European Power Grids: AI at the Helm

This infographic discusses the trend of AI-powered grid solutions being deployed by European DSOs, as well as the key countries adopting AI power grid applications.

AI-Powered Grid Solutions Deployed in Europe



Key European Countries Leveraging AI in the Power Sector



- The EU Directive 2019/944 Article 32, mandating the use of flexibility services by DSOs, is stimulating the growth of advance AI-powered applications, including DERM, ADMS and VPP.
- Western European electric utilities have exhibited a strong interest in deploying AI-powered ADMS technologies, as compared to Eastern Europe.
- Europe, being the global VPP leader in terms of capacity (GW), largely reflects the supply-side VPP capacity. Germany is the leading market for VPP deployments, with several governmental and EU supported projects.
- With the growing number of grid edge and smart behind-the-meter devices, smart meters, solar roof-top, and energy storage units, customer engagement activities are gaining traction in Europe, particularly in Nordic France and the Netherlands.
- The governments of Norway, the Netherlands, and Denmark are facilitating transport electrification by establishing smart EV charging stations, enabling fast and efficient charging.
- Electric utilities are moving towards the predictive monitoring of their critical assets through AI-powered drones or aircraft technologies, covering the inspection of thousand miles of transmission and distribution assets.