

The Honorable Dave Loeb sack

1. If Europe, mainly Germany, is not implementing new energy grid capabilities correctly, what can we learn from their mistakes?

Through dramatic action and substantial subsidies, renewables now account for more than a quarter of German energy production. Photovoltaics have provided the most dramatic growth in renewable capacity, and with good reason. Photovoltaics offer clean, distributed electricity, and their unsubsidized cost will soon be competitive with traditional centralized fossil-fuel generation. However, Germany is facing significant challenges integrating intermittent photovoltaic generation with the rest of its electricity infrastructure, and power quality and reliability are threatened.

Ideally, Germany would have balanced their intermittent solar generation with other forms of clean, reliable, distributed on-demand generation. If they had done so, their electricity generation would be cleaner and more robust.

I believe that the electricity grid of the future will include Stirling engines, fuel cells, or other on-demand distributed infrastructure. For that reason, I have directed the engineers at DEKA to develop a Stirling engine that can help our country meet those needs.