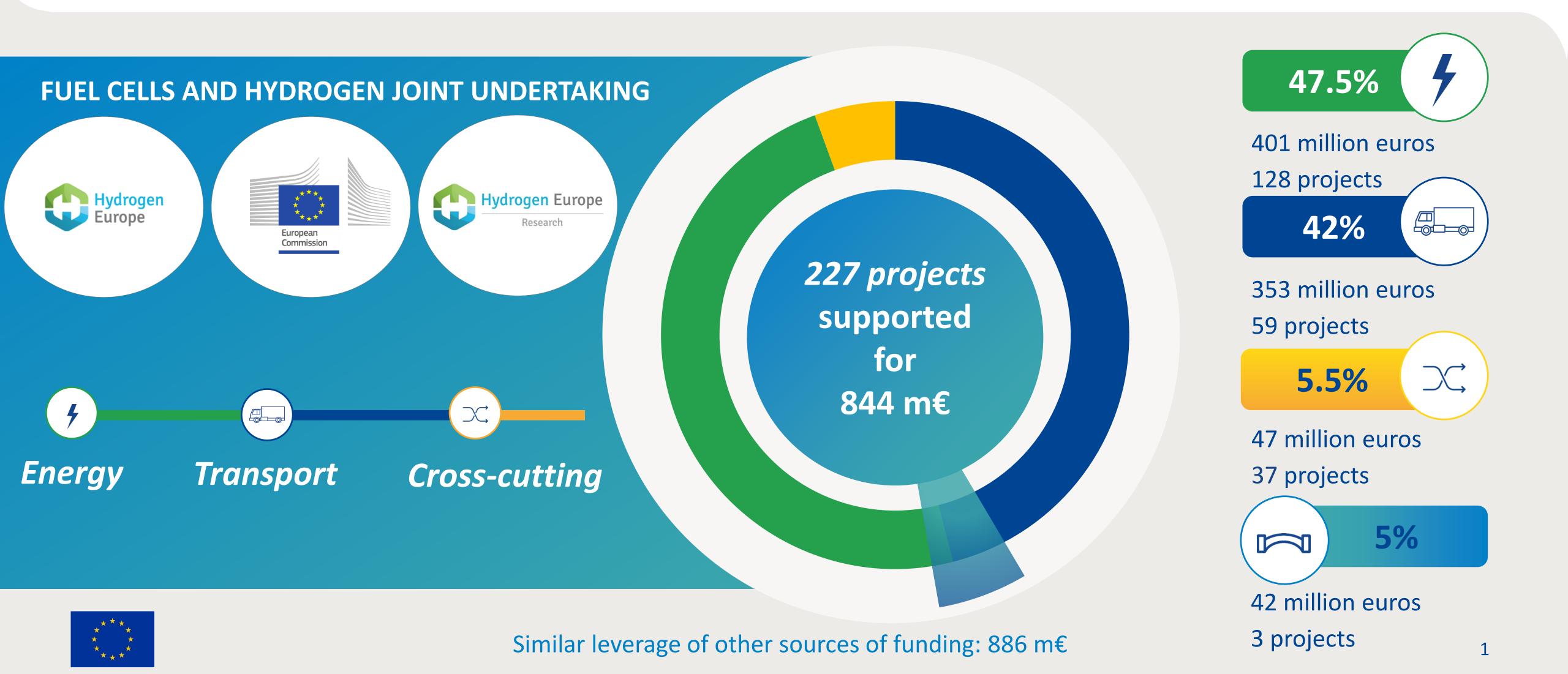
## Strong public-private partnership with a focused objective





## Electrolysers: ready for commercialization

## scaling up to great capacities while reducing costs











Steel industry Refineries

Food industry

## **Electrolyser Demo Projects** 12 25 10 FCH JU Support (MEuro/MW) Capacity (MW) 2011 2014 2016 2017







steelmaker Voestalpine to test coal-free blast furnace

The Austrian steelmaker Voestalpine is to build an experimental facility for producing hydrogen with the aim of technology and economics at scale are oven . . . it will have a long development and thereby investment period."

Other steel companies, including osco of South Korea and Sweden's SSAB, have launched initiatives to develop hydrogen-based steelmaking, though none are thought to have vet become a commercial reality.

Voestalpine last year opened a \$740m plant in Texas that makes hot briquetted iron, a pre-material sometimes used in steel production. The facility lowers carbon emissions by using natural gas instead of coking coal.

Some industry experts are sceptical about the economic feasibility of new steelmaking technologies, particularly

