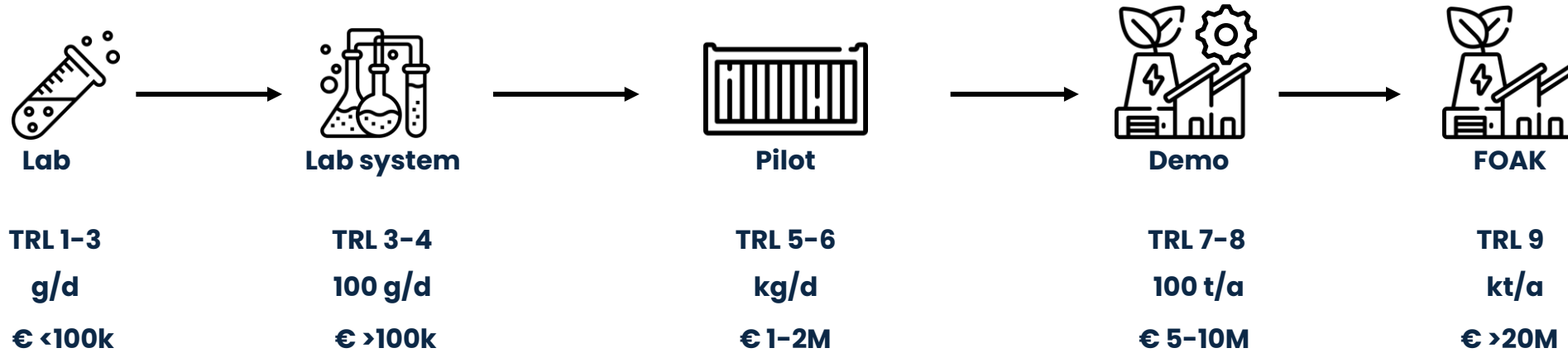


Scaling novel e-SAF technologies

Comment on the aireg webinar „Transition to carbon-neutral aviation“

Scaling e-SAF technologies from lab to commercial plants requires many steps



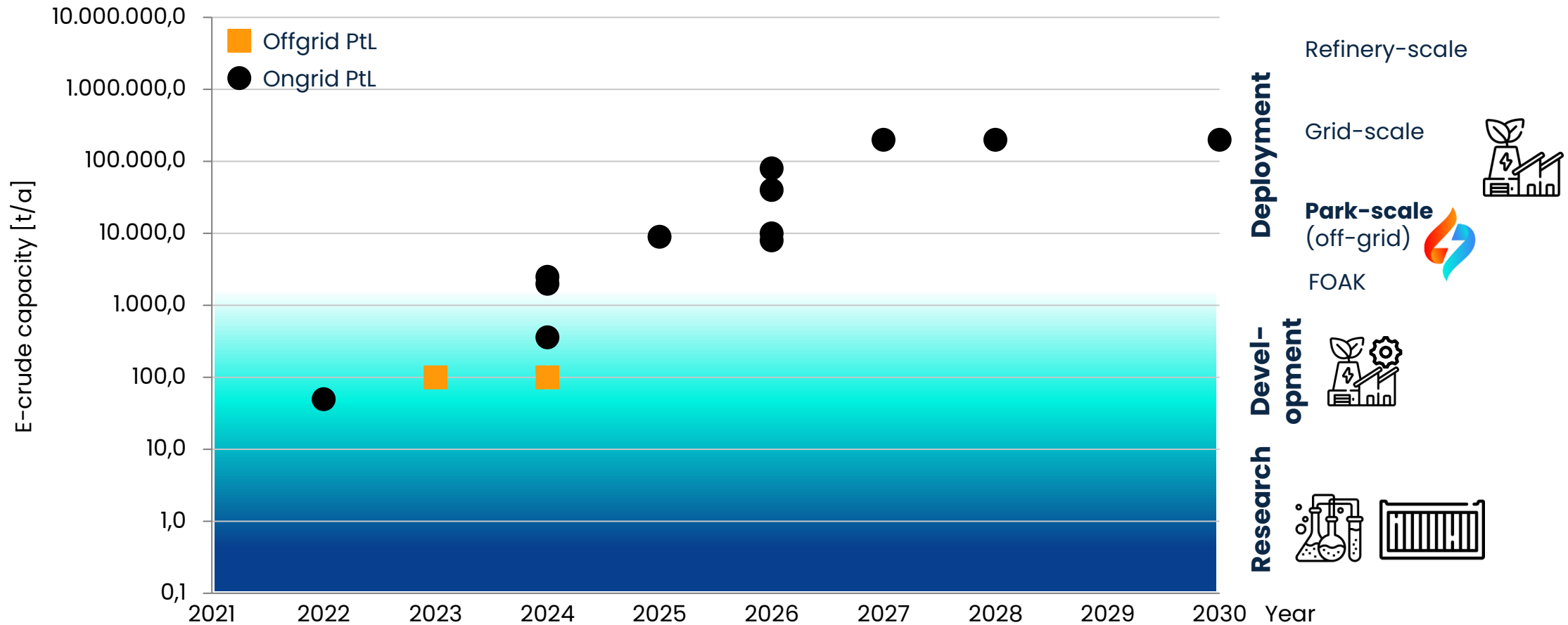
Do we still need R&D?

- How can we optimize product yields (catalysts, separation technologies,...)?
- How can we use side-streams?
- How can we increase efficiency (heat integration, novel process concepts)?
- **Better technologies for CO₂ conversion?**
- **Load-flexible/off-grid operation?**



→
Each step takes 1-3 years with scaling factors of 10-25x

Novel e-SAF tech must be scaled now



Overview of Power-To-Liquid (PtL) SAF plants, announced, in construction, or in operation. Sorted by (expected) year of operation start and nameplate capacity of e-crude production.