

THE CULTURE OF INNOVATION



Ammonia Energy Association Conference

Session 5 – Moving from Brown to
Green Ammonia

R. Stockwell

01 Nov 2018, Pittsburgh, PA

confidential

CASALE TODAY

“In-situ”
retrofit

A3000

Ax-Radial
beds

3-bed
converter

A6000

Pseudo-
isothermal
converter

A600

Super
Revamp

AWU

A2000

A60

AMMONIA PROCESS

A60

KNOWLEDGE CONDENSED

IN A SMALL PLANT

confidential

Minimum energy

Economy of scale

Small scale, distributed?



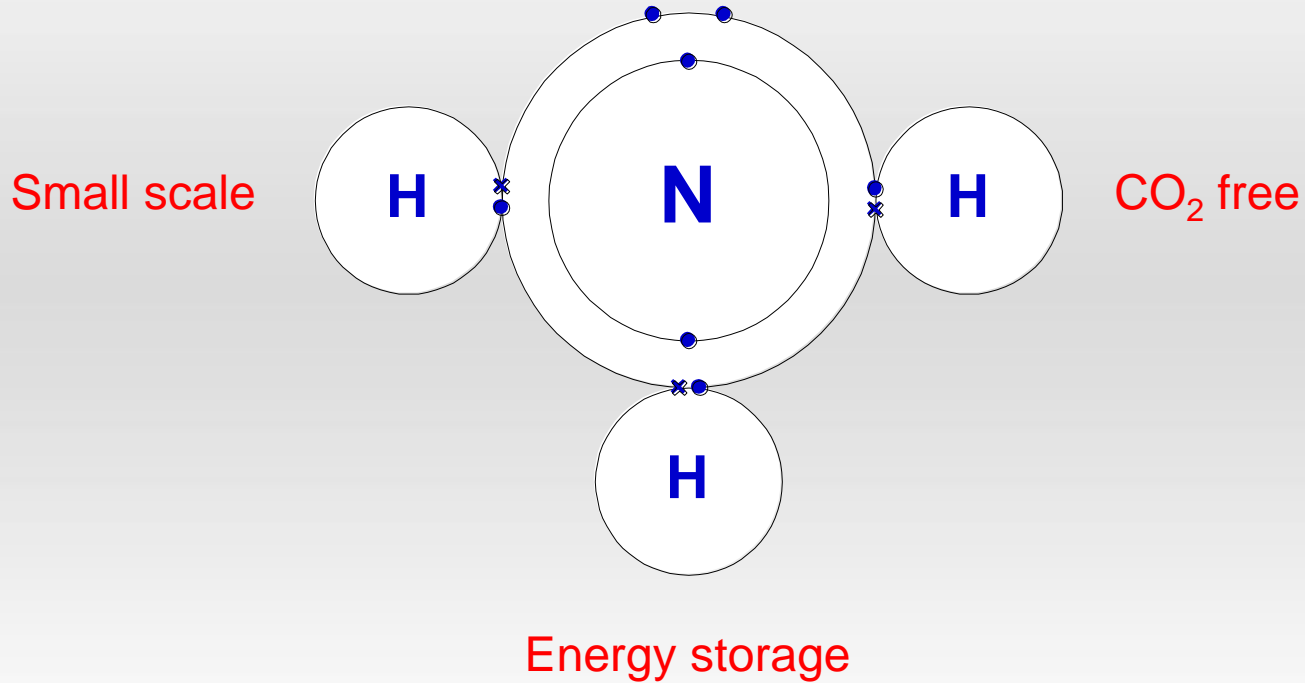
A60, RE-FOCUS DESIGN

SIMPLICITY

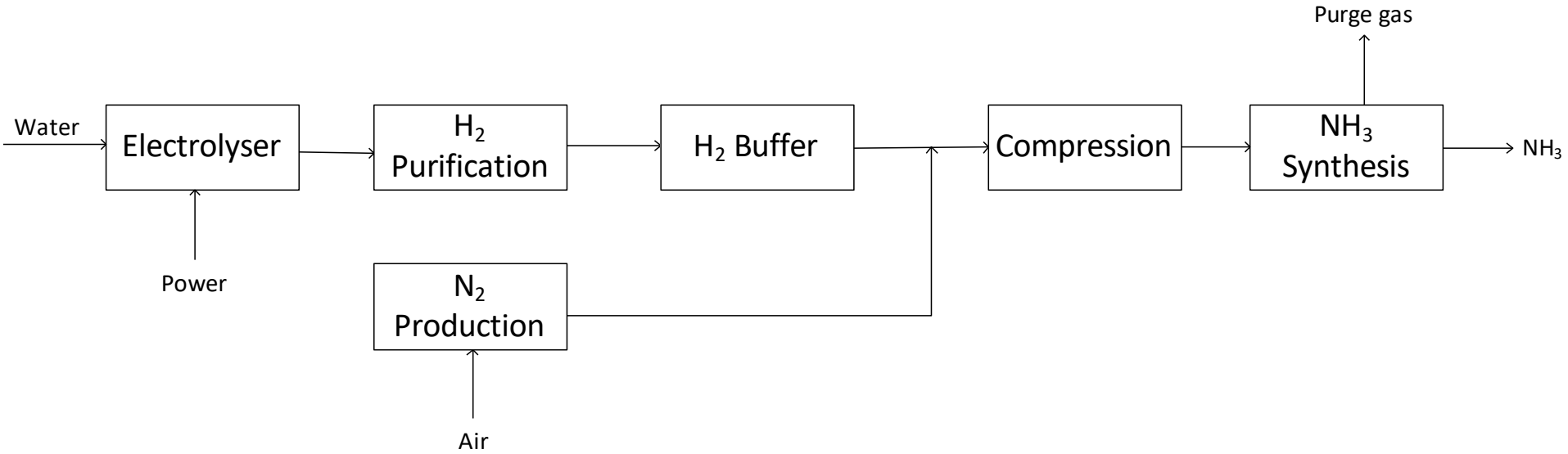
TIME

COSTS

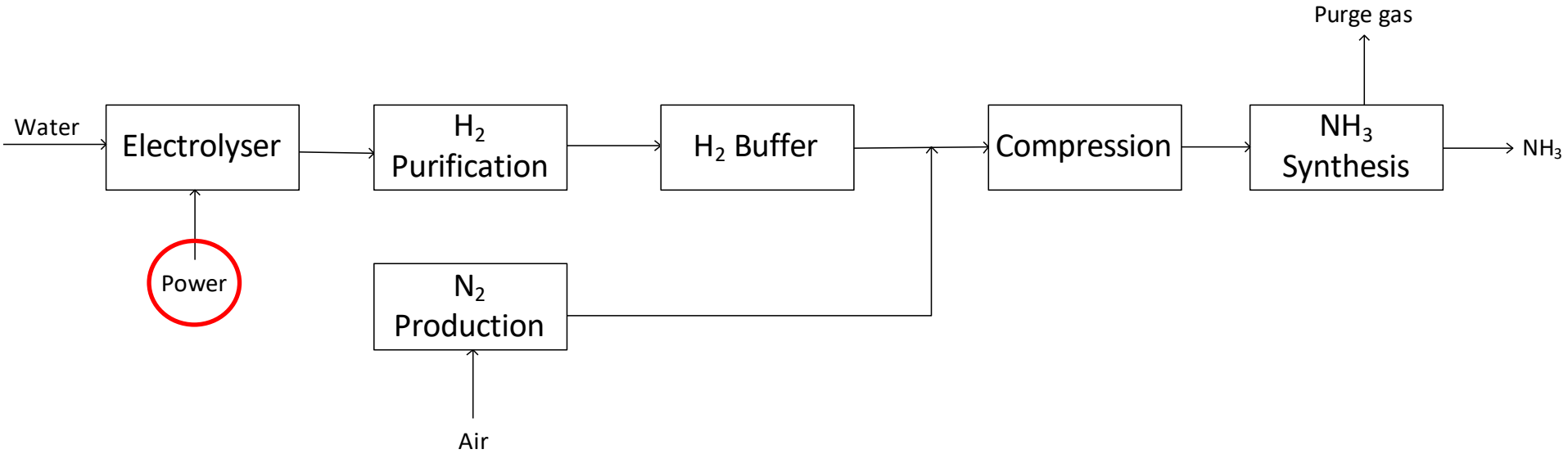
RENEWABLE AMMONIA: WHY?



NH₃ FROM RENEWABLES



NH₃ FROM RENEWABLES



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THANK YOU