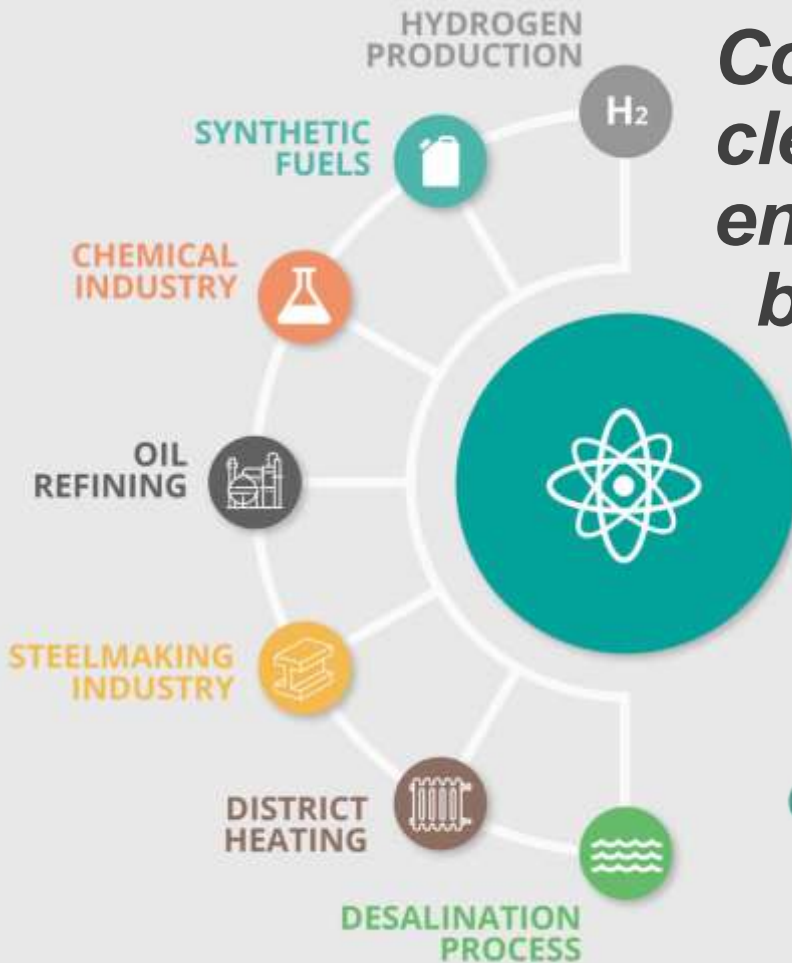
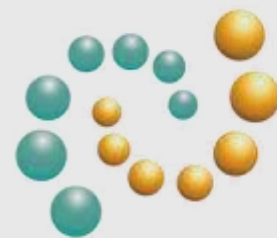


NC2I mission



Contribute to clean and competitive energy beyond electricity by facilitating deployment of nuclear cogeneration plants



NC2I
Nuclear Cogeneration Industrial Initiative

NC2I vision: Low temperature applications

- *District heating, desalination, a few industrial applications*
- *Coupling with existing LWR reactors,*
 - *so far, limited deployment,*
 - *but with very positive records,*
 - *already for a long time.*
- **Objectives of NC2I:**
 - *Identifying conditions for larger deployment*
 - *Supporting initiatives that will facilitate the growth of low temperature nuclear cogeneration*
 - *in particular application to cogeneration of LWR SMRs and other types of SMRs with enhanced safety features*

NC2I vision: High temperature applications (1)

Key target for 2030:

Commissioning in Europe the first High Temperature Gas-cooled Reactor (HTGR) as heat source for industrial plant

Actions:

Cooperate with EC & authorities in target countries to facilitate:

- *preparing an appropriate licensing framework*
- *defining the most suitable technical options*
- *selecting an appropriate site*
- *developing a robust business model*
- *building a team for the project & gather available expertise*
- *developing international collaboration*

NC2I vision: High temperature applications (2)

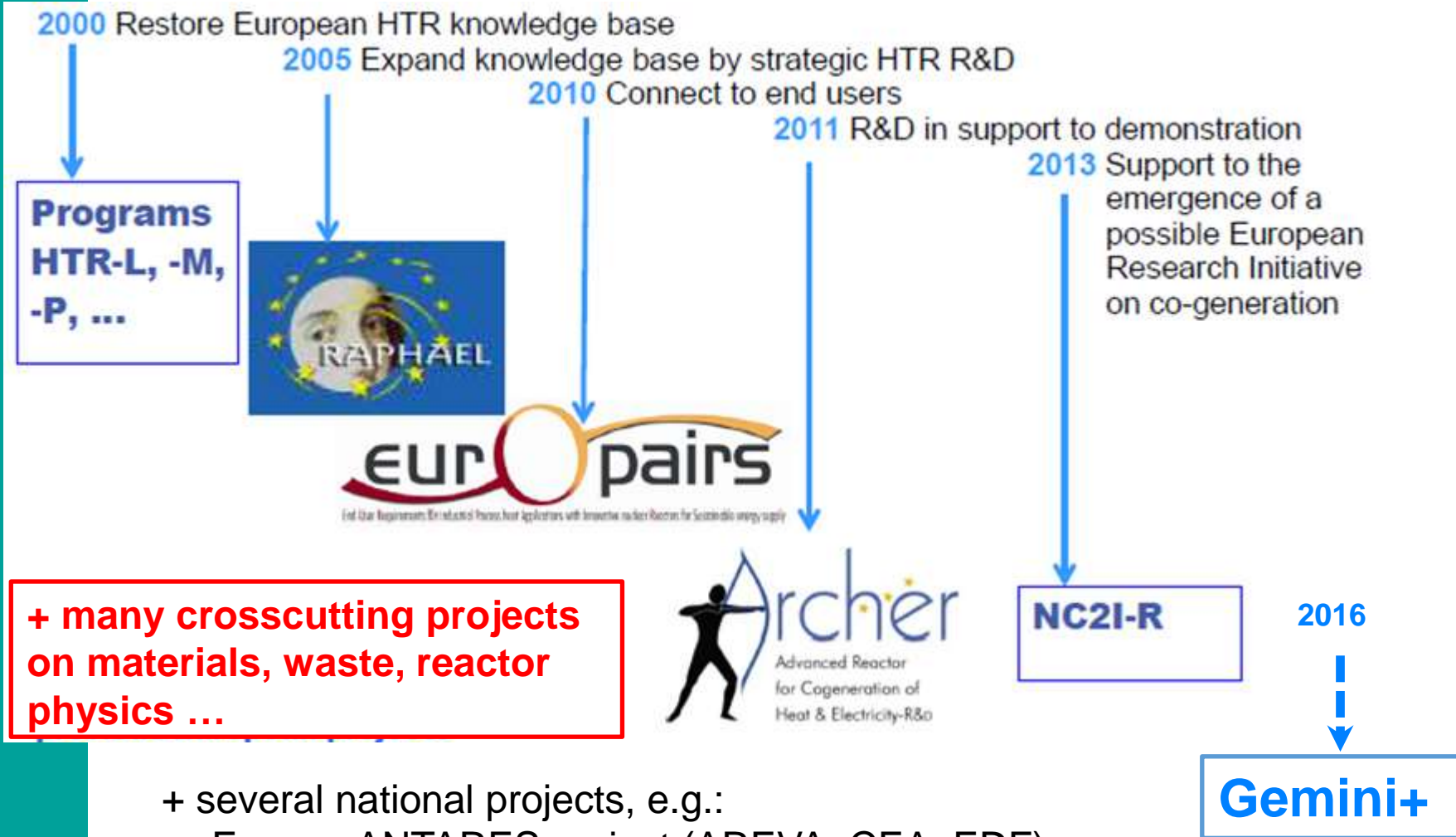
Long term Targets:

- *Prepare technologies for extending the heat market for high temperature nuclear cogeneration (preheating, advanced heat network technology, VHTR) and evolutions of heat applications*
- *Cooperate with other GEN IV systems (SFR, LFR, GFR, SCWR, MSR) and share HTGR experience to support their future use in cogeneration*

Actions:

- *Cooperate with EC and interested countries to have research actions launched for progressing towards these objectives*
- *Support such actions*

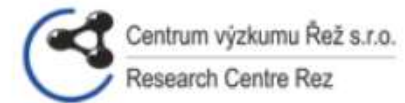
Nuclear cogeneration European projects



+ several national projects, e.g.:

- France: ANTARES project (AREVA, CEA, EDF)
- Germany: SYNKOPE – HTR for lignite gasification, STAUB II,
- Poland: HTRPL – Polish industry needs, coupling technologies

Members of the NC2I:



www.nc2i.eu

NC2I is one of SNETP's strategic technological pillars, mandated to coordinate the demonstration of high temperature nuclear cogeneration.



www.snetp.eu

SNETP – current structure

SNETP is a consortium of 68 member organisations.

It is not a legal entity.

Governance:

- *General Assembly: 1 person representing each member*
- *Governing Board: ~26 people elected for 2 years*
 - *Chairman: Hamid Ait Abderrahim*
- *Executive Committee: ~15 people appointed by GB for 2 years*
 - *Chairman: Richard Stainsby*

Pillars:

- *NUGENIA – legal entity, General Assembly, ExCom, End-users Group*
- *ESNII – not legal entity, Task Force, Executive Board*
- *NC2I – not legal entity, Task Force, End-users Group*

SNETP – future structure

SNETP taking over the legal entity from NUGENIA

Governance:

- *General Assembly: 1 person representing each member*
- *Governing Board*
- *No Executive Committee?*

Pillars: not legal entities

- *NUGENIA – ExCom, End-users Group*
- *ESNII – Task Force, Executive Board*
- *NC2I – Task Force, Executive Board, End-users Group*
 - *NC2I Vision Paper and MoU under preparation,*
 - *to be approved by the Task Force,*
 - *most probably 7-8.10.2017 (next to Gemini+ kick-off),*
 - *together with NC2I chairman elections.*