



INSTITUTE OF  
ENERGY PROCESS ENGINEERING AND  
CHEMICAL ENGINEERING



**TUBAF**  
The University of Resources.  
Since 1765.

**NK<sup>2</sup>**  
**Netzwerk**  
Kohlenstoff  
kreislaufwirtschaft

## NETWORK FOR A CIRCULAR CARBON ECONOMY (NK2)

Carbon-containing raw materials are vital resources for the industry and underpin the wealth of numerous nations. A transition towards a circular carbon economy can enable carbon to be retained in the system rather than be emitted as climate polluting CO<sub>2</sub> upon combustion/incineration and/or landfilling. This however requires a change from business-as-usual and a coupling of the energy, chemical, engineering, waste management, recycling and other sectors (e.g. processing, lightweight construction and renewables).

To facilitate intersectoral dialogue and collaboration, the Network for a Circular Carbon Economy (in German: Netzwerk Kohlenstoffkreislaufwirtschaft i.e. NK2 Network) was initiated in 2019 by Fraunhofer IMWS and IEC, TU Bergakademie Freiberg. The NK2 Network provides a neutral platform for information exchange, knowledge sharing as well as intersectoral and international networking. Aim is to identify and address socio-technological-economical-ecological-political issues associated with the transition towards a circular carbon economy via workshops, experience exchanges, trainings and conferences, and to actively engage diverse stakeholders from industry, science, politics and civic society and contribute to socio-political dialogues about associated opportunities and challenges.

### Key topics and focuses for NK2:

- Materials, processes and technologies for the conversion of solid carbon resources
- Integration of "green" hydrogen and renewable power
- CO<sub>2</sub>-neutral, gas-based processes and syntheses for chemical basis materials and synthetic fuels
- New materials, material utilization & process design
- Information technology
- Systems and sustainability for a circular economy
- Political framework and legislations

### NK2 partners include:

- Air Liquide Forschung und Entwicklung GmbH
- BASF SE
- CARBOLIQ GmbH
- CAC Engineering GmbH
- Covestro Deutschland AG
- Chair of Decarbonization and Transformation of Industry, Brandenburg University of Technology Cottbus-Senftenberg (BTU Cottbus)
- DBFZ Deutsches Biomasseforschungszentrum gemeinnützige GmbH
- Dow Olefinverbund GmbH
- Eurofins Umwelt Ost GmbH
- Fraunhofer IKTS
- Hallesche Wasser und Stadtwirtschaft GmbH
- Hochschule Merseburg
- IBExU Institut für Sicherheitstechnik GmbH
- INEOS Inovym
- LyondellBasell Polyolefine GmbH
- ROMONTA GmbH
- RWE Power AG
- Sächsisches Textilforschungsinstitut e.V.
- Synthos Schkopau GmbH
- TAF Thermische Apparate Freiberg GmbH
- ...

### CONTACT



Prof. Dr.-Ing. Bernd Meyer  
(Scientific Director)

PD Dr. rer. pol. Roh Pin Lee  
(Scientific Coordination)

PHONE  
+49 3731 39-4511

E-MAIL  
circular-carbon@iec.tu-freiberg.

# Join Our Network!



## CONTACT

TU Bergakademie Freiberg  
Institute of Energy Process Engineering and Chemical Engineering | Professorship of Energy Process Engineering  
Fuchsmuehlenweg 9 D, 09599 Freiberg/Germany

