

# NET-ZERO / “CLIMATE TECH”: SUMMARY



- ❑ Excessive anthropogenic CO<sub>2</sub><sup>1</sup> (greenhouse gas) emissions are putting the world (and mankind) on a potentially irreversible path towards climatic disaster
- ❑ ‘ClimateTech’ covers a broad range of approaches that:
  - directly mitigate or remove emissions
  - assist adaptation to the impacts of climate change
  - enable the transition to ‘net-zero’
- ❑ Negative emissions technologies (which capture emissions at source or remove existing CO<sub>2</sub>) are emerging as vital tools in the pursuit of ‘net zero’
- ❑ Renewed impetus since the 2015 Paris Agreement & COP26 (2021) have put tackling carbon emissions front-and-centre of society, policy and industry
- ❑ According to the IEA, reaching net zero will be virtually impossible without ‘carbon dioxide removal’ (CDR) approaches:
  - Carbon capture & storage (CCS): CO<sub>2</sub> is captured and permanently stored (“sequestered”)
  - Carbon capture & utilisation (CCU) or ‘CO<sub>2</sub> use’: e.g. CO<sub>2</sub> serves in the production of fuels, chemicals, construction materials
- ❑ According to the IEA, upwards of \$160 billion will need to be spent on CCUS projects over the 2020-2030 timeframe, a ten-fold increase over the previous decade.
- ❑ A host of promising “eliminating” approaches (to complement nature-based sinks) are emerging: DAC<sup>3</sup>, BECCS<sup>4</sup>, soil carbon sequestration, mineralisation, biochar ....
- ❑ There is a growing number of carbon-focused (“ClimateTech”) investment funds, though investing interest is also coming from generalist cleantech / sustainability / impact funds
- ❑ “Carbon” alone isn’t yet a theme to drive M&A (exits) and few meaningful pure-play companies exist; however, as the subsector grows corporate activity will increase

<sup>1</sup> CO<sub>2</sub> = carbon dioxide; <sup>2</sup> CCUS = carbon capture utilisation & storage; <sup>3</sup> DAC = direct air capture; <sup>4</sup> BECCS = bioenergy with carbon capture & storage (BECCS)