

# The Early-Stage Funding Environment for Cleantech Companies

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# About Northstar

# About Northstar



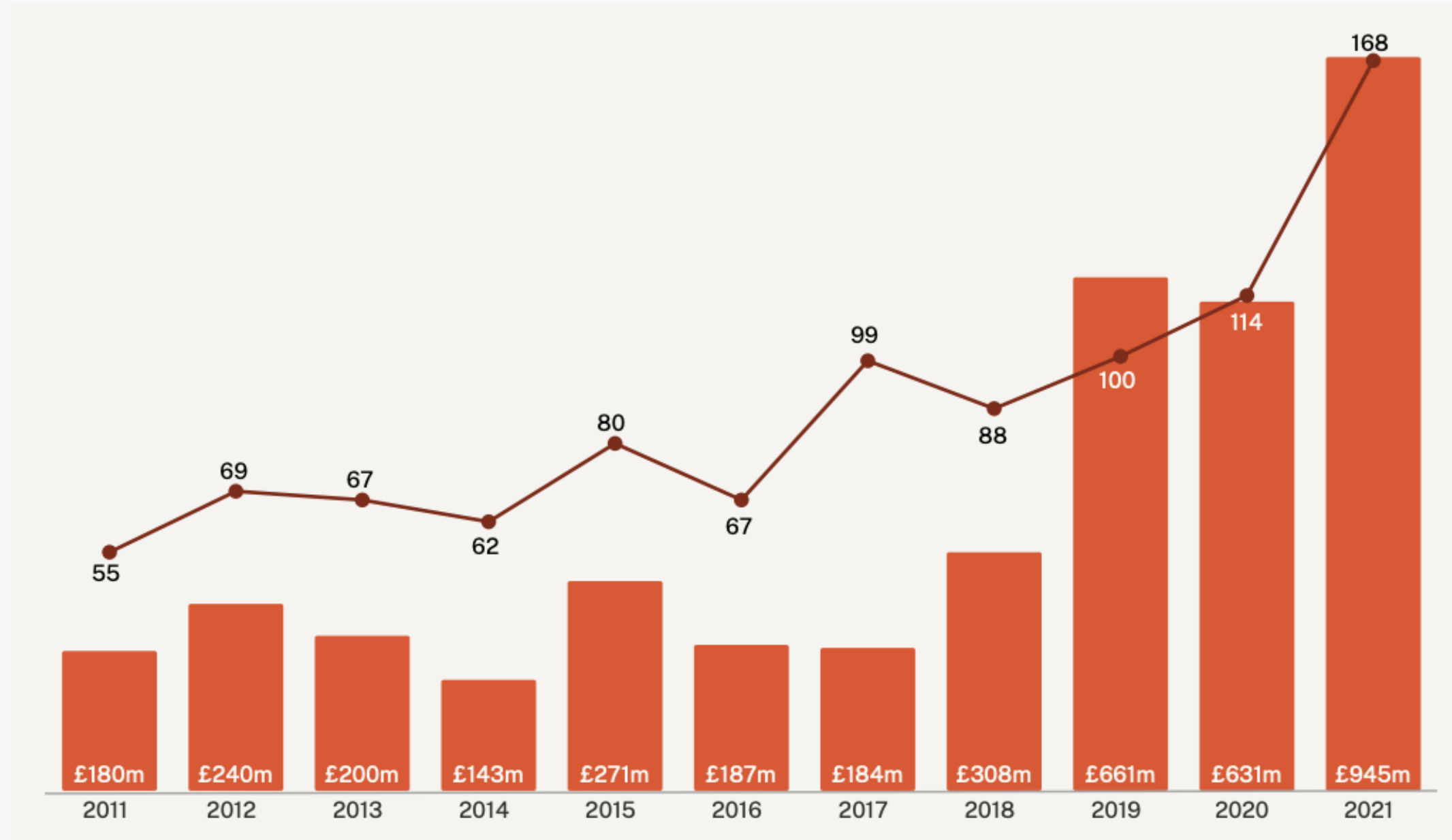
## Early Stage VC Based in Newcastle

- c£100m under management
- Currently investing £30m from North East Innovation Fund

## Our Portfolio

- Top Innovative companies across the spectrum
- Focusing on impact at scale
- Cleantech and life science focus

# Investment Environment for Cleantech deals



## Cleantech deals over the last 10 years by number and total amount invested

(source Beauhurst)

# The Good News



## UK is the 3<sup>rd</sup> largest market for cleantech investment (behind US and China)

- 2021 strong year for investment (50% up on 2020)
- Half of this was in Q4 (£455m in 47 deals)
- 2022 around £800m in H1 but significant fall off in quarter to June

## Investment not London centric. Biggest deals include:

- British Volt (Northumberland) - £100m
- Tevva (Essex) - £42m
- Vertical Aerospace (Bristol) - £149m
- Intelligent Growth Solutions (Scotland) - £42m

# The Good News



## Strong market by number early stage and venture deals

- 35% Seed stage / 48% Venture
- Funding for early stage mostly UK based and generalist
- Later stage funding more international in flavour
- Crowdfunding very successful route for investment
  - Seeing significant direct Angel investment

## Expect an increase in specialist funds as the sector matures

- New entrants include (2021)
  - Clean Growth Fund (£100m)
  - Circularity Capital (£200m)
- Total of about 20 funds specialising in in early stage clean tech for a list please contact me.
- 08 • Also a number of corporates prepared to look at early stage, including Shell, Equinor and EDF



# Sectors Attracting Investment Attention



## EV supply chain and battery charging

- AEM , Char.gy

## Agritech

- Elemental, Intelligent Growth Solutions, Zero Carbon Food

## Carbon Tracking and Accounting

- Pledge, Emitwise, Lowercarbon

## Bioprocessing and Clean Meat

- CellRev, Higher Steaks

# Head Winds



## Supply chain issues impacting companies' ability to operate

- Massive increase in geopolitical uncertainty
- Inflation not under control
- Weakened pound (will increase US investment)

**Although there is still a lot of money around, uncertainty is reducing appetite for investment, particularly for pre revenue early stage businesses.**

# Case Studies

# AEM



**Manufactures permanent magnet free electric motors for domestic and commercial vehicles.  
Currently raising £35m Series A.**

Spin-out from Newcastle University.

Founded in 2015

Early stage funding. :  
Northstar  
Corporate Investor  
Angels and angel groups  
Grants

4 rounds of funding to date - mixture of equity, grants and debt

## Thesis

Electric Motors (EM) will dominate the market across all sectors.

Current EM tech heavily dependent on rare earth magnets which carry significant political and price risk. AEM makes motors free of rare earth magnets.

First motors commercially available on the road. Strong order book including OEMs and tier 1 suppliers.

Solution cheaper than permanent magnet motors, perform as well or better and are fully recyclable.





# Cellrev



## Developing technologies to support large scale cell culture.

Spin-out from Newcastle University.

Founded in 2018

Initial funding from Northstar and an angel

Two further rounds of funding introducing specialist alternative protein investors

Series A to close April 2023.

## Thesis

Developing a suite of technologies for the growth of mammalian cells at scale targeting the production of lab grown meat (Cell Ag) and production of biologics.

Cell Ag active area of the market with £\$6bn being invested in 2021.

Strong technical progress - MVP of fully integrated continuous culture system by end of year.

Negotiations with large equipment manufacturers for JDAs to scale the technology

Validation projects under discussion with customers for development of bioprocessing for cell therapy, and Cell Ag





# Sphera



**A speciality materials company in the construction sector focusing on sustainable, low carbon material to achieve net zero.**

Spin-out from Durham University.

Initial funding from Northstar  
Series A round Northstar and Green Angel syndicate

Earthshot Prize nomination places Sphera among the 1000 most impactful and inspiring solutions for environmental issues globally.

## Thesis

Developed 3 disrupting products to date - SpheraLite, SpheraZero and SpheraCure, ranging from concrete blocks to admixtures made from waste plastic.

By using Sphera products, the expected carbon saving for 10 standard 3 bed detached homes (27,000 blocks) is 87 tonnes. This is equivalent to 13 years of electricity to power each home or planting 1,440 trees.

Engaged extensively and developed relationships with market participants in the waste/plastic recycling and concrete/construction sectors.





# Contact Us

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