

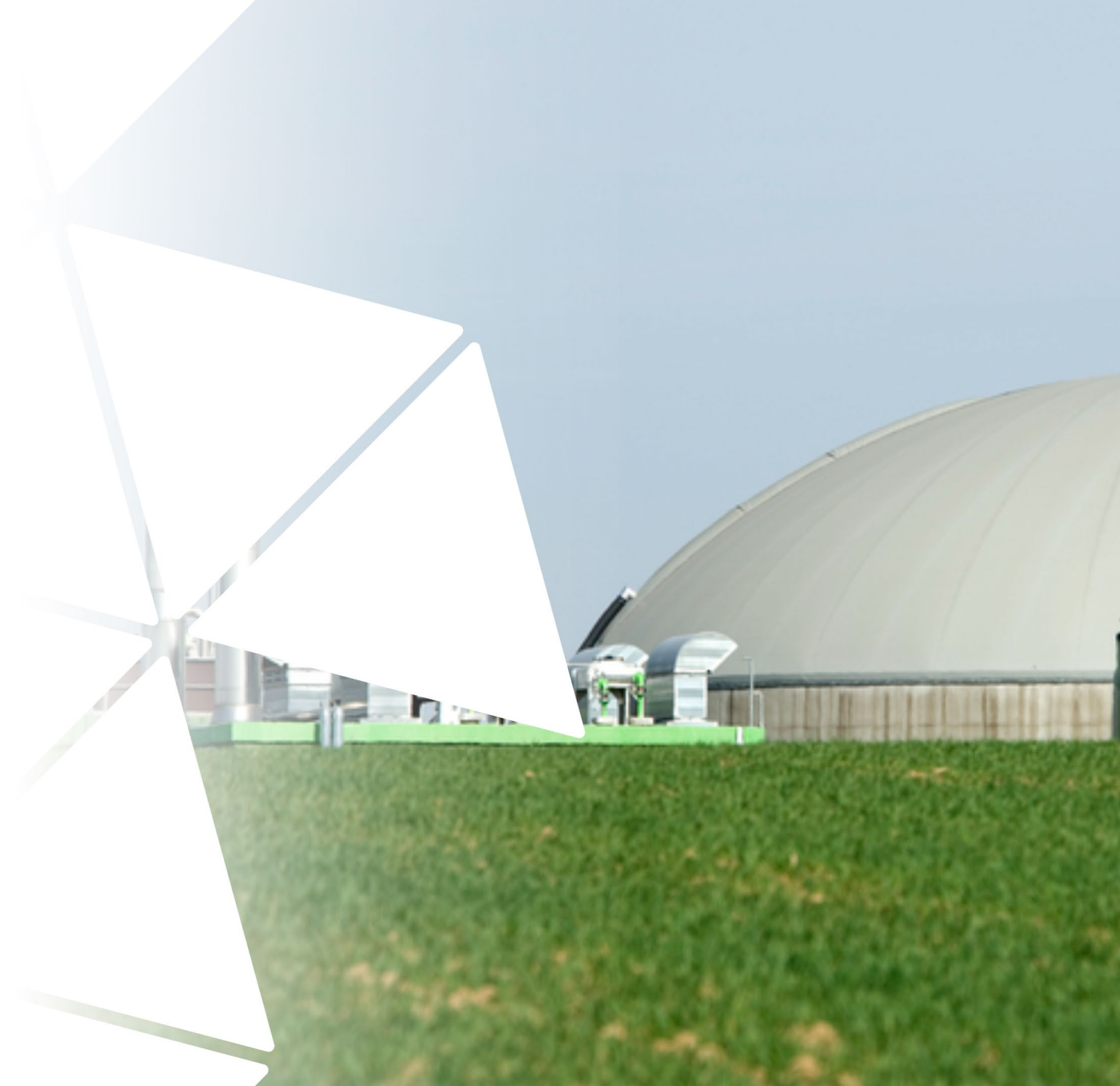


Green Gas Britain

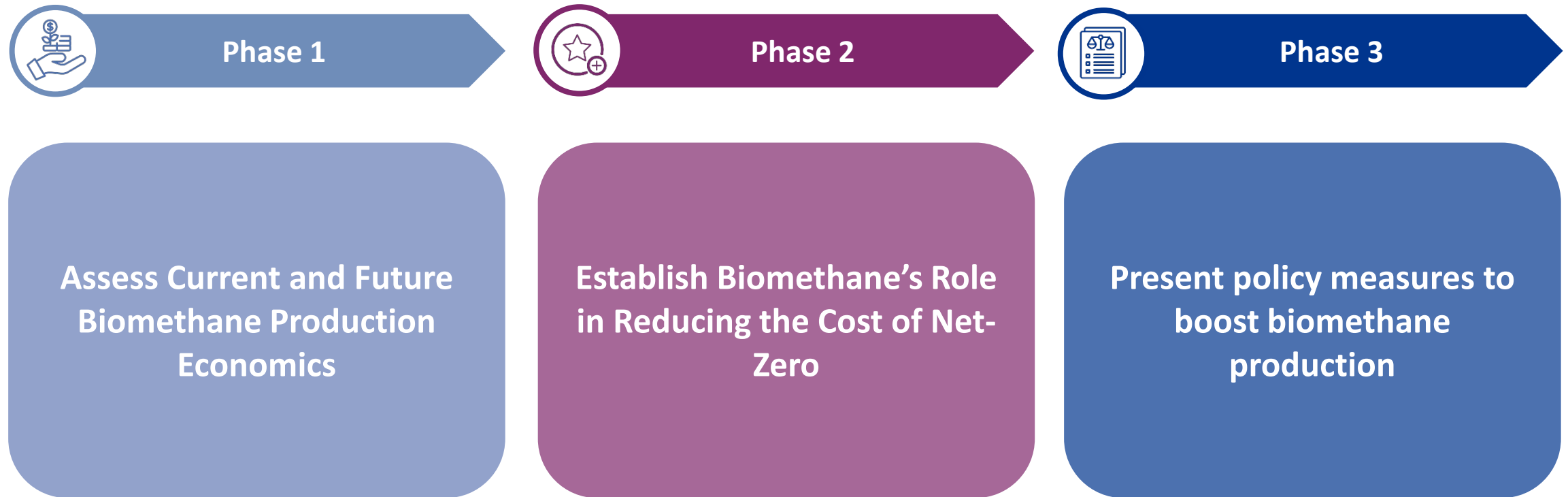
Reducing the cost of Net Zero with
biomethane

Green Gas Day - October 2025

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Baringa has been engaged to assess the opportunity to reduce the cost of biomethane production as a solution to support Net Zero by 2050

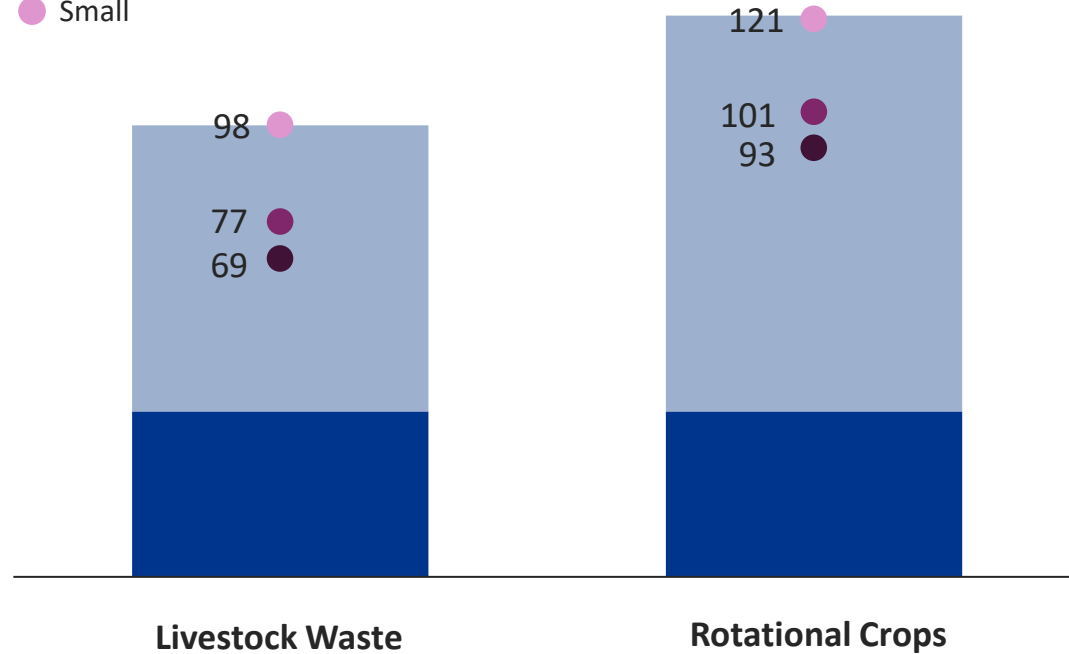


1

Production costs for a typical biomethane project could be reduced by 25% from current levels if key barriers are overcome

Net Levelised Costs by Feedstock Type and Plant Size, 2025 (£/MWh)

Net Levelised Cost
by Plant Size:



Biomethane production costs and cost reduction potential to 2050

CAPEX

Capital Expenditure

£12 /MWh

Grid Connection

£1 /MWh

OPEX

Propane

£4 /MWh

Feedstock

£2 /MWh

Other Operational
Expenditure

£ 4 /MWh

1. Using the Barriers Overcome case for a Medium Livestock Waste project

Source: Baringa LCOE Model, Baringa analysis

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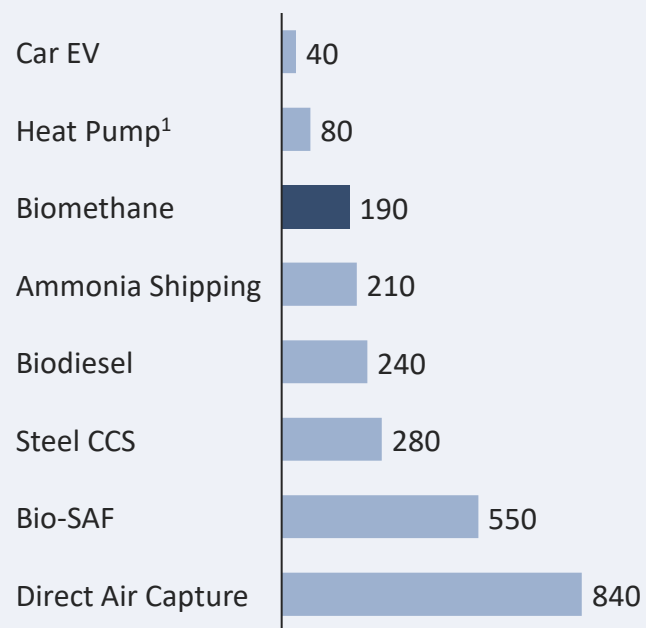
2

Biomethane delivers £174bn of cumulative savings to the energy system to reach Net Zero by 2050 in our Central Case



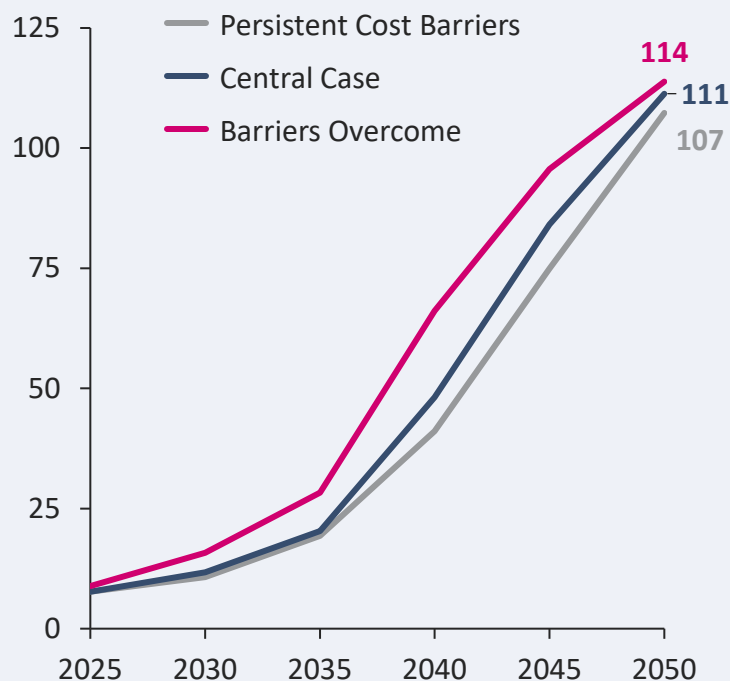
Low-cost abatement

Abatement costs of different technologies by 2050, (£/tCO₂)



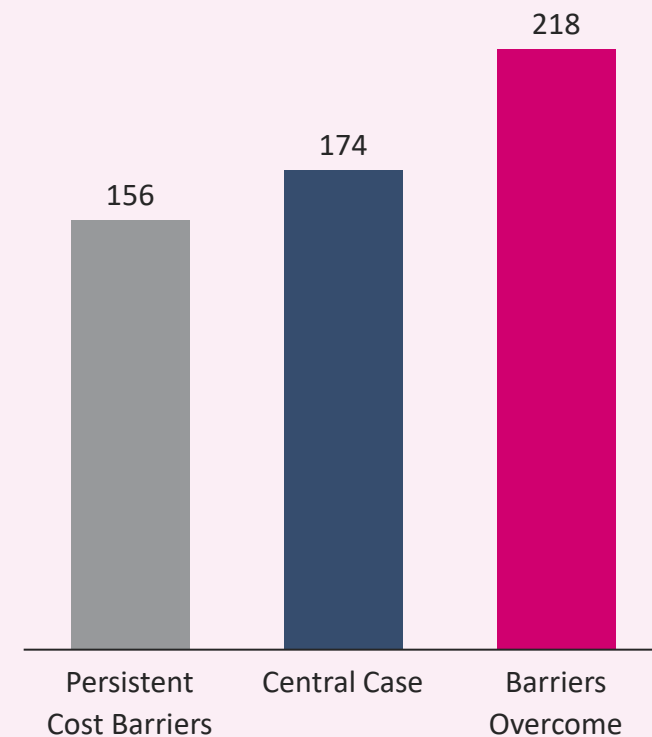
Over 100 TWh of growth by 2050

Biomethane production, (TWh/year)



Cost savings of £218bn if barriers are overcome

Cumulative Savings by 2050, (£bn)



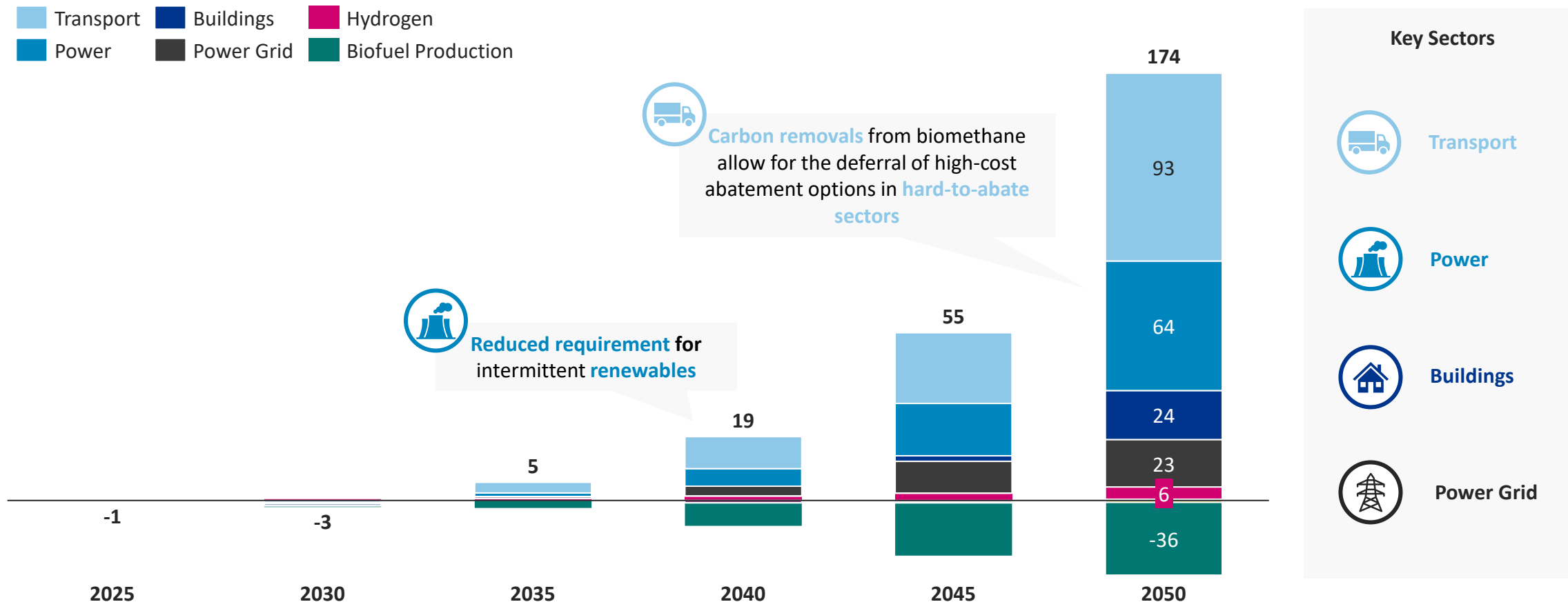
Source: Baringa analysis, ESME model

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The cumulative saving in the Central Case is mostly achieved in transport, as well as power generation, avoided electricity network investments, and buildings

Cumulative System Cost Savings in our Central Case, (£bn)



Current policy principles fail to incentivise the most cost-effective GHG savings from sustainable feedstocks at scale



Long-term certainty

Policy underpins new investment but expires in **March 2028**, affecting development decisions now



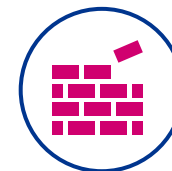
Cost-effective GHG savings

Tariffs disincentivise scale and constrain projects, while failing to recognise sustainable, non-waste feedstocks



Market-based

Tariffs risk failing to reflect the lower cost of new biomethane, reducing incentive for competitive pricing.



Compatibility

The UK ETS is yet to recognise emissions reduced through biomethane used in place of natural gas



Requires amendment



Fundamentally challenged

3

We have set out nine recommendations to enable higher volumes of production, reduce production costs and realise the wider value of biomethane



Enable higher volumes and cost reduction

Realising the wider value and supporting competitiveness

1

Clarify
future policy
timelines

2

Formalise a
production
target

3

Recognise
biomethane
in UK ETS

4

Design the
future support
mechanism

5

Broaden
feedstock
evaluation

6

Facilitate a
market for
GGRs

7

Provide access
to CCS
infrastructure

8

Phase out
propanation
requirements

9

Establish a
digestate
market

Quick Wins

Longer-term
Opportunities



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