

# AN INTRODUCTION TO **ecocycle**<sup>®</sup>

Eco Cycle is an innovative, automated cycle storage solution for up to 204 bikes. Eco Cycle stores multiple bikes below or above the ground, with a retrieval time of just 13 seconds. Whether installed in public spaces or within new residential and commercial buildings it provides the ideal solution for mass storage of bikes in cities.

## BENEFITS OF ECO CYCLE

- Reducing on-street clutter and enhancing the public domain.
- Minimising the footprint of bike storage within high-value space.
- Meeting statutory obligations for provision of cycle spaces more efficiently.
- Improving take-up of cycling spaces provided, thanks to greater security and convenience.
- Encouraging and facilitating a green mode of transport, improving health and wellbeing among cyclists and the population at large.
- Future-proofing developments and adding a unique and distinctive selling proposition to a development or area.



## NATIONAL ECONOMIC AND SOCIAL BENEFITS OF CYCLING



**£2.9 BILLION**

total contribution to UK economy



increase in volume of cycle sales in 2010, generating £1.62 billion



**£128 MILLION**

saving to UK economy per annum in absenteeism



**£1 : £13 - £19**

The average cost benefit ratio in in cycle schemes investment

## ECONOMIC AND SOCIAL RETURN ON INVESTMENT OF ECO CYCLE

Commercial use



**£1 : £1.72**

over 5 years

Residential use



**£1 : £1.39**

over 5 years

Through calculation of the Return on Investment (ROI) a comparison is made of the investments (costs) associated with the installation and management of an Eco Cycle Automated Storage System and the financial and social (in this case, crime savings) returns. Inclusion of health and wellbeing benefits as well as other aspects such as convenience and potential to improve the public realm would increase the ROI ratio further, but these are more difficult to directly and solely attribute to Eco Cycle due to a lack of immediately available research data.

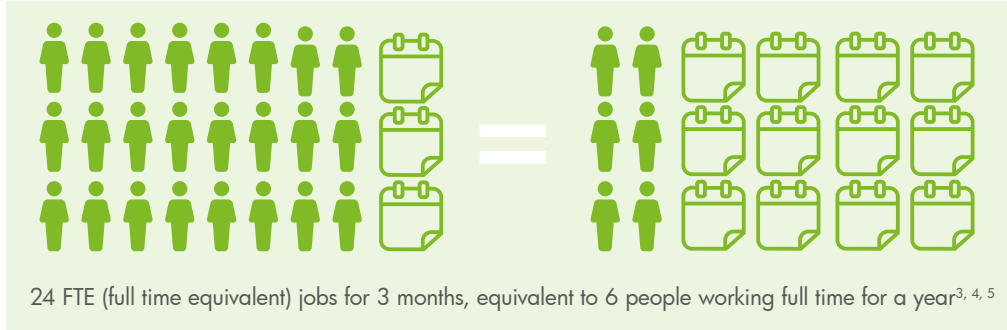
For every £1 of investment by a developer who installs an Eco Cycle Automated Storage System, a value in the range from £1.39 - £1.72 is created to society.



# ECONOMIC ASSESSMENT

## of a typical Eco Cycle installation

### CONSTRUCTION PHASE

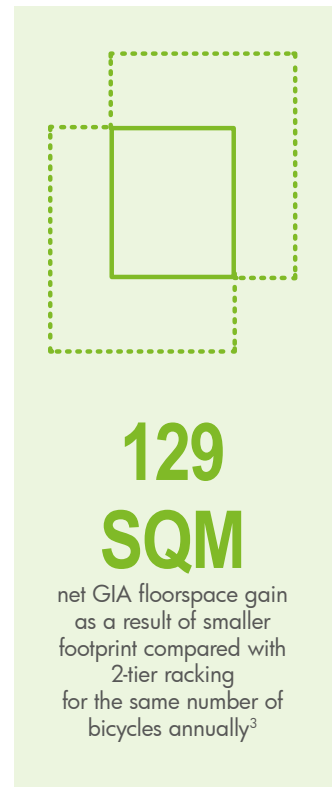


### OPERATIONAL PHASE

#### Commercial use



#### Space savings



#### Residential use



#### Crime savings

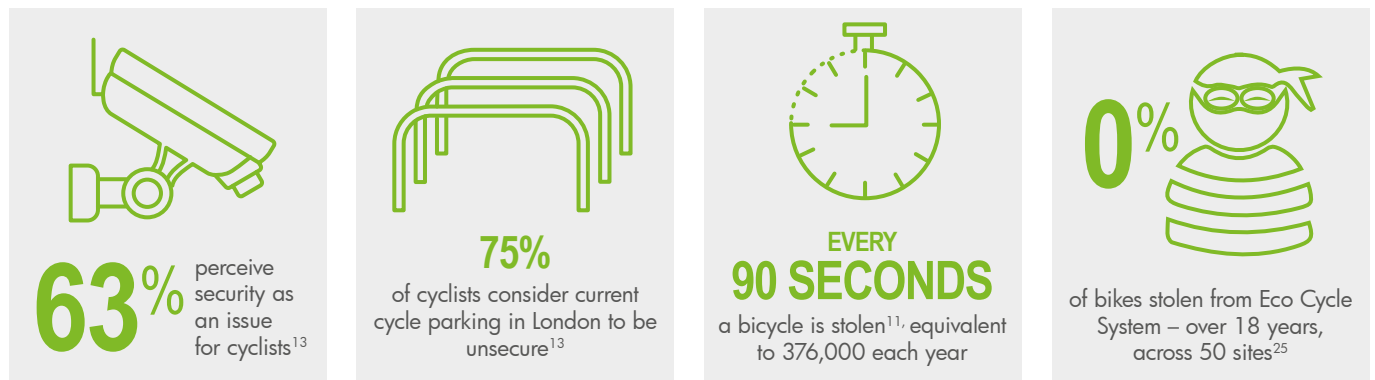


# SOCIAL VALUE ASSESSMENT of Cycling

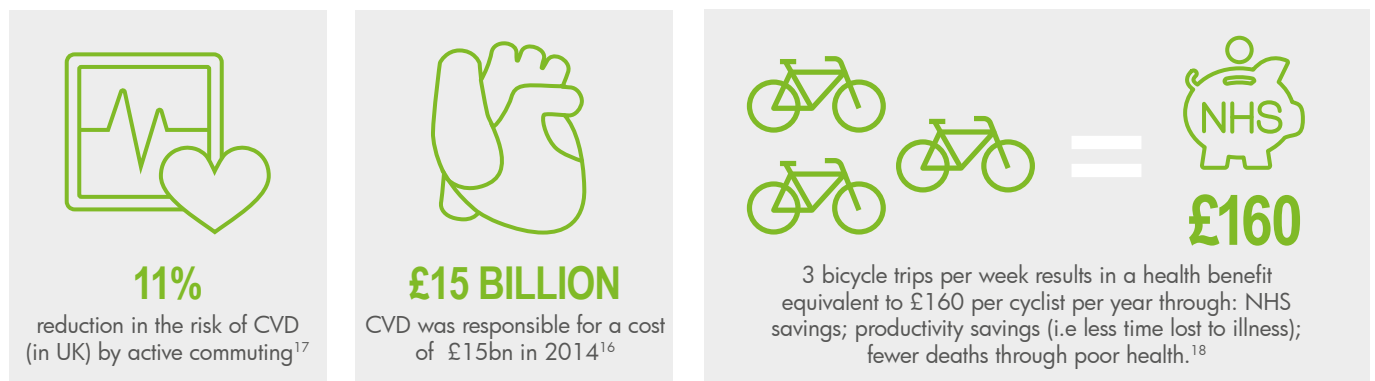
## SOCIETY GAINS



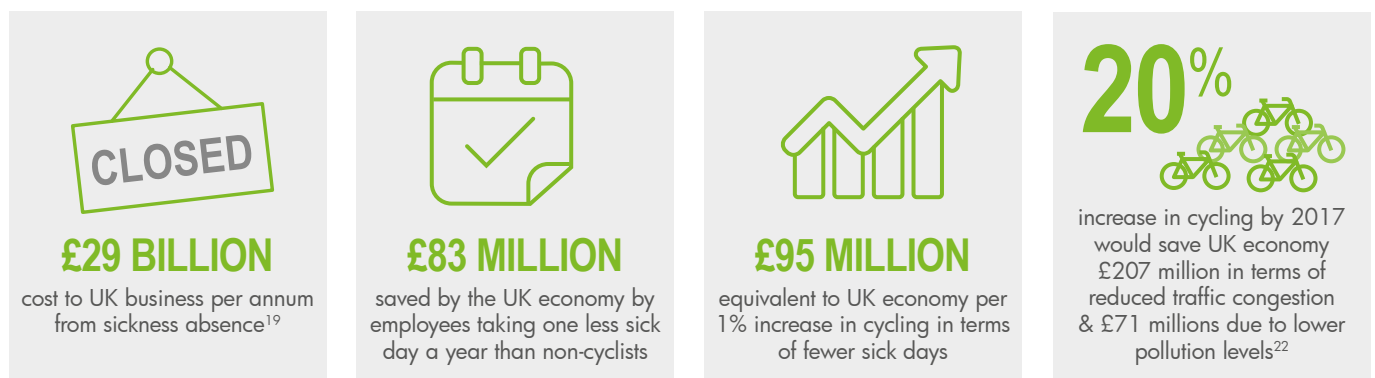
## CRIME SAVING



## HEALTH BENEFITS



## ABSENTEEISM



## Reduced Congestion

# SOCIAL VALUE ASSESSMENT

## of Cycling

### WELLBEING



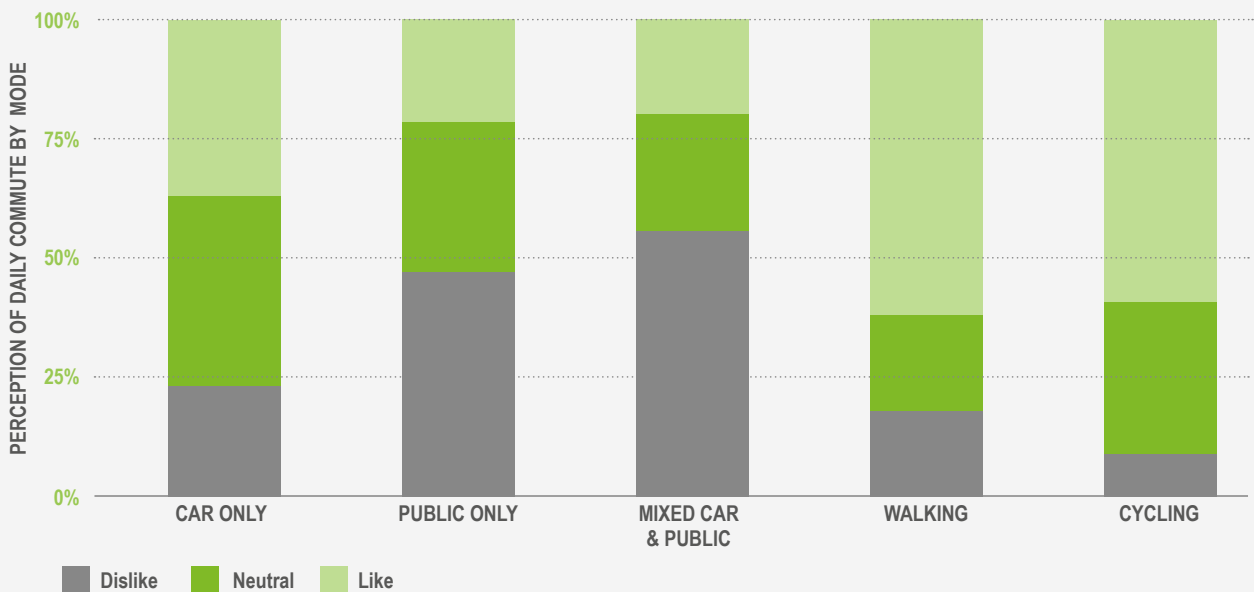
Mental health wellness programme saves state £4.17 for every £1 spent.<sup>23</sup>



Eco Cycle manufacturers Apex run an apprenticeship scheme, supporting young people into skilled employment

### HOW HAPPY IS YOUR COMMUTE?

The following graph shows satisfaction of commuters, relative to transport mode.<sup>24</sup>



**86%**

of employees believe that cycling to work has led to health benefits<sup>26</sup>



**60%**

of employees participating in the scheme believe that cycling to work has improved their productivity at work<sup>26</sup>

# RESEARCH APPROACH

## ECONOMIC AND SOCIAL VALUE ASSESSMENT RESEARCH APPROACH

Economic and Social Value is an assessment approach which converts socio-economic and community benefits into monetary values. For Eco Cycle, financial metrics have been identified that demonstrate the secondary or indirect impacts of the scheme. By undertaking an Economic and Social Value Assessment it has been possible to calculate the Social ROI. This ROI compares the costs of an investment in an Eco Cycle unit to the economic and social value, thus giving a financial metric to the benefits generated by the installation of an Eco Cycle automated storage system.



This independent Assessment was developed by Turley Sustainability and Economics Team using established Social Value methodology which included the Additionality Guide produced by the Homes and Community Agency (HCA).

### References

1. ROI = (construction Gross Value Added (GVA) + operational income + rent/sales value from space gain + GVA from additional employees + crime savings) divided by (construction cost + maintenance and management costs). Operational impacts are calculated applying a 5 year persistence.
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5. Experian (2016) Quarterly Economic Forecasts
6. ONS (2012) Census 2011
7. HCA (2015) Employment Densities Guide
8. Online: [tfl.gov.uk/modes/cycling/cycling-in-london/cycle-parking](http://tfl.gov.uk/modes/cycling/cycling-in-london/cycle-parking) (last accessed 19/09/16)
9. Savills (2016) City Office Market Watch
10. Halifax (2016) House Price per m<sup>2</sup> Survey
11. Department of Transport (2016) Table: Bicycle Ownership by Age
12. ONS (2016) Annual Population Estimates
13. Online: [stolen-bikes.co.uk/statistics](http://stolen-bikes.co.uk/statistics) (last accessed 19/09/16)
14. Eco Cycle Survey, 2016
15. Cowi A/S & City of Copenhagen, 2009
16. Cebr for AstraZeneca. The economic cost of cardiovascular disease from 2014-2020 in six European economies. Aug 2014
17. Hamer M and Chida T. Active commuting and cardiovascular risk: a meta-analytic review. Preventive Medicine 2008;46:9-13
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22. London School of Economics (LSE), The British Cycling Economy, 'Gross Cycling Product' Report, 2011
23. PriceWaterhouseCoopers, 2008, Building a Case for Wellness
24. Victoria Transport Policy Institute, Valuing Transit Service Quality Improvements - Considering Comfort and Convenience In Transport Project Evaluation, 2016
25. Confirmation from Japanese Operator, Giken, referring to Japanese Automated Cycle Storage Installations (email: 28/09/2016).
26. Cycle to Work Alliance, Cycle to Work scheme boosting employee health and wellbeing across UK.





ecocycle®

Who'd have thought that a cafe  
could park 408 bikes?



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