

# Report on the social profitability of the Energy Garden project.



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## Summary

This report assimilates the SROI report by Alfred De Haan, Hanze University of Applied Science (2017) and research articles by Eleanor Chalkley and Teresa Colgan, Imperial College London (2019).

SROI (Social Return On Investment) is a means by which social returns can be quantified financially in a way that can be easily reported to stakeholders. This report updates the 2017 SROI assessment of this venture with new information and updated figures.

A visual summary of this report can be found overleaf.

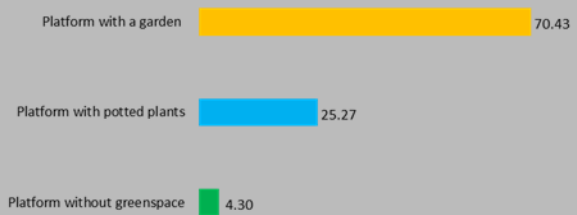
# SROI

## ENERGY GARDEN



210 Active volunteers

% of people who preferred



~ 1 million commuters benefited

£1

invested

£11.35

social return



Estimated £161,316 saving for NHS mental health services per year.

## Reference material

### Social Performance: A study into the profitability of Energy Garden

Alfred De Haan, 2017

This presents a SROI report of the Energy Gardens project following guidelines set out by the Cabinet Office. Information was gathered using questionnaires and the outcomes of the project that were assessed were;

- Volunteer mental health
- Volunteer physical health
- Volunteer engagement
- Volunteer trust and belonging
- Local government Environmental Targets
- Improved Commuter Safety
- Project coordinator knowledge
- Project coordinator confidence

These factors were used to calculate a SROI of £4.27 social return per £1 financial investment.

### Human appreciation of Greenspace – Greening the Overground.

Eleanor Chalkley, 2019

This project carried focused on the benefits that Energy Gardens have had on commuters using the Overground line. Commuters reported that the three biggest perceived benefits of the gardens were; visual appeal, enhanced mood and improved air quality. The outcome that this project has introduced is;

- Improved commuter mood

This will be added to the existing SROI

### Exploring Human Appreciation for Urban Greenspace; An Evaluation of the Impact of Greening the Overground on Station Users.

Teresa Colgan, 2019

This report has much of the same findings as that above but also found that commuters have a greater appreciation of established gardens over planters on the platform. This information will be used to supplement the SROI.

## Updates made to the existing SROI

### Inclusion of commuter mood outcome

The commuter mood outcome was based upon two questions in the 2019 questionnaire, 'How much do you like this station relative to others' and 'How would a garden affect your mood'. The answers were used to find that stations with gardens had a 25% higher station rating on average. This was used to calculate a proxy of the improvement in commuter moods as a result of the gardens.

This questionnaire was filled out by 186 individuals. However, it is estimated that around 1,000,000 unique passengers use Overground stations with Energy Gardens every year. This is based upon the total number of journeys taken on the Overground line and the fact that these will be mostly repeat customers (daily commuters).

The financial proxy for improved commuter mood was taken from the SROI Wiki Vois Database – Troubled Families and is the same proxy as used for the improved mental health of volunteers.

Deadweight percentage for commuter mental health was based on the volunteer mental health deadweight score as indicated by the 2017 questionnaires. This value was set at 64% deadweight.

Attribution percentage was calculated from the percentage of a commuter's day spent at Overground stations. This was calculated at 0.0035% or 5 minutes per day, which is a conservative estimate given train waiting times.

This information was used to create an estimate of the financial savings that the gardens may have for mental health spending by the NHS, this estimate is £161,316 savings per year.

### Updated volunteer and volunteer coordinator numbers

Over the two years since the initial SROI report was carried out there have been significant increases in the numbers of volunteers involved in the venture. The number of active volunteers has increased from 149 in 2017 to 210 in 2019 and the number of volunteer coordinators has increased from 26 in 2017 to 35 in 2019, there is one volunteer coordinator per Overground station.

## Inflation adjustment

The outcome map has also been adjusted for inflation at a rate of 3.3% over the interim, this rate was taken from the Bank of England inflation calculator.

## Timeframe adjustment

Two years have passed since the publication of the first SROI of this project and so the new duration has been adjusted from 20 years to 18 years.

## Revised SROI estimation

As mentioned, the original SROI report conducted on this project found a value of £4.27 social return per £1 invested. Using the original report along with the additions and updates indicated above, provisional data estimates the current SROI of the Energy Gardens project to be a £11.35 social return per £1 spent. This higher value reflects the increase in the number of individuals involved in the project as well as the addition of a newly identified outcome.

It must be noted that this report is not exhaustive and that there may be positive outcomes missed from this, and previous, reports. Similarly, it must be noted that this report is based upon provisional data and a number of assumptions (for example the amount by which an individual's mental health is impacted by the visual appeal of their regular train station).

This report suggests that whilst the potential impact of the Energy Garden project is likely to be relatively small upon the life of a commuter who will spend only minutes in a station every day, the number of commuters and regularity of commutes means the sum of the impacts results in a significant social return on investment.

Social Value UK - Impact Map

Spreadsheet for developing SROI analysis. See guidance tab for further details.

Stage 1		Stage 2		Stage 3							Stage 4		Drop	Impact		
Stakeholders	Intended/unintended changes (What do you think will change for them?)	Inputs (What do they invest?)	Value of the investment (currency/only enter numbers)	Outputs (Summary of activity in numbers)	The Outcomes (What changes?)	Indicator	Source	Quantity	Duration	Financial Proxy	Value in currency	Source	% (What would have happened without the activity?)	% (What else contributed to the change?)	Over the next 5 years?	Quantity times financial proxy, less the weight displacement
Local community / local volunteers	More outdoor activities in their area	Time	0	210	Improved mental health	Questionnaire Health and well-being questions (survey questions 20a / 20b)	Questionnaires	7.69	20	Mental health service costs per individual (exclusively and depression)	1,023.06	SROI Wiki Vois Troubled Families	64%	7%	0%	£ 2,597.73
			0	210	Improved physical health	Questionnaire Health and well-being questions (survey questions 19a / 19b)	Questionnaires	12.53	20	Economic benefits associated with physical activity	37,839.95	SROI Wiki Vois scotland.gov.uk	64%	7%	0%	£ 156,548.00
			0	210	Improved competence, engagement and purpose	Questionnaire Knowledge and skills question - I got a chance to learn new things	Questionnaires	4.77	20	Cost of personal development course	717.18	NEED Learning relearning.com	60%	20%	0%	£ 1,088.07
			0	210	Increased trust and belonging	Questionnaire Community life questions (survey questions 15a / 15b)	Questionnaires	23.30	20	Annual value attributed to talking to neighbours more frequently	17,025.24	BHPS Data 1997-2003, from poundhavee (2008)	31%	26%	0%	£ 202,953.13
			0	0	Environmental improvement (less CO2 emission)	Tonnes CO2 avoided	Previous research (Peak research)	0.00	20	Value saving on CO2 per ton	65,426	SROI report Recovering (Walker, 2016)	0%	0%	0%	£ -
			0	210	Improve commute (safety)	Questionnaire "Transport for London question - how safe do you feel walking on the London Underground"	Previous research / Questionnaires	10.29	20	Willingness to pay to avoid moderate injury (discounted to avoid double counting)	3,084.69	report net consulting ltd/ukw/relange or SROI report July 2016 final.pdf	48%	0%	0%	£ 16,505.56
			0	0	Improve mental health	Questionnaire, "Station rating questions and Benefits" questions.	Imperial College Questionnaires.	14800000.00	20	Mental health service costs per individual (exclusively and depression)	1,023.06	SROI Wiki Vois Troubled Families	64%	100%	0%	£ 161,316.10
Employees	Get work experience. Helping them to evolve	Time	0.00	35	learning new things	Questionnaire Knowledge and skills questions (survey questions 24 and 25a/25b) got a chance to learn new things)	Questions	12.08	5	Employment training at employment or job centre	833.95	Social Value Bank and Value Calculator had.org.uk	80%	0%	25%	£ 1,984.84
			0.00	35	being confident in what they do	Questionnaire Knowledge and skills questions (survey question 25a/25b) (felt able to complete difficult tasks)	Questions	0.00	5	psychological self-esteem	1,347.55	Personal Social Services Research Unit (PSSRU)	80%	0%	25%	£ -
			0	0	Dividends paid	Financial statements	20.00	20	Investment plus 4% interest	-5,559.25	Financial model Energy Garden	0%	0%	0%	£ -111,165.00	
<b>Total</b>			£ 500,000.00													£ 431,808.45

\* Prices are adjusted for inflation

Discount rate

3.5%

Who do we have an affect on? Who has an effect on us?	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16	Year 17	Year 18	
Local community / local volunteers	£ -	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	£ 2,597.73	
	£ -	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	£ 156,548.00	
Local government/Government /Environment	£ -	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	£ 1,088.07	
	£ -	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	£ 202,953.13	
Transport for London	£ -	£ 20.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	£ 161,316.00	
	£ -	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	£ 16,505.56	
Employees	£ -	£ 1,994.84	£ 1,488.63	£ 1,116.47	£ 837.36	£ 628.02	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	
	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
Investors	£ -	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	£ -111,185.00	
	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -	£ -
<b>Total</b>	£ -	£ 270,512.34	£ 431,312.13	£ 430,939.98	£ 430,660.86	£ 430,451.52	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	£ 429,823.50	
<b>Present value of each year</b>	0.00	£ 281,364.58	£ 402,634.49	£ 388,693.17	£ 375,296.06	£ 362,428.63	£ 349,661.70	£ 337,637.39	£ 326,412.93	£ 315,374.82	£ 304,709.97	£ 294,405.77	£ 284,450.01	£ 274,630.93	£ 265,537.13	£ 256,557.62	£ 247,681.75	£ 239,489.28	£ 231,400.27	
<b>Total Present Value (PV)</b>	£ 5,518,986.49																			
<b>Net Present Value</b>	£ 5,018,986.49																			
<b>Social Return</b>	£ 11.04																			

(Value per amount invested)





	Outcome	Financial proxy	Value £	Source	Rationalisation
local volunteers	Improved mental health	Mental health service costs per individual (anxiety and depression)	£990.56	SROI Wiki Vois Database - The Troubled Families Cost Database	Represents cost saving through improved of mental health as a result of the project.  Used in an SROI report for local food (Courtney, 2013). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes
	Improved physical health	Economic benefits associated with preventing premature death due to physical inactivity	£36,617.65	SROI Wiki Vois Database - Scottish Executive 'Let's Make Scotland more active: A Strategy for Physical Activity'	A key outcome is the promotion of physical activity through participation in the gardens  Used in an SROI report for local food (Courtney, 2013). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes
	Improved competence, engagement and purpose	Cost of personal development course on 'Delivering Beyond Yourself'	£694.11	REED Learning <a href="http://www.reedlearning.com/trainingcourses/personaldevelopment/delivering-beyond-yourself">http://www.reedlearning.com/trainingcourses/personaldevelopment/delivering-beyond-yourself</a>	Used in an SROI report for local food (Courtney, 2013). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes.
	Increased trust and belonging	Annual value attributed to community engagement	£ 16,475.74	BHPS Data 1997-2003, from Powdthavee (2008) Putting a Price tag on friends, relatives and neighbours, Journal of Socio-Economics 37(4), 1459-1580	Used in an SROI report for local food (Courtney, 2013). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes.

Government /Environment	Environmental improvement (less CO <sub>2</sub> emission)	Value saving on CO <sub>2</sub> per ton	£63.30	SROI raport Repowering (Walker, 2016)	Used in an SROI report for Repowering (Walker, 2016). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes.
Transport for London	Improve commute (safety)	Willingness to pay to avoid moderate injury (discounted to avoid double counting)	2,985.00	report NEF consulting <a href="http://www.refuge.org.uk/files/Refuge-SROI-report-July-2016-final.pdf">http://www.refuge.org.uk/files/Refuge-SROI-report-July-2016-final.pdf</a>	Report by NEF Consulting on public safety. NEF is an expert in SROI, appropriate proxy as it values specifically for public spaces like platforms
Employees	learning new things	Employment training at employment or job centre	£807	Social Value Bank and Value Calculator <a href="http://www.hact.org.uk">http://www.hact.org.uk</a>	Used in an SROI report for Repowering (Walker, 2016). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes.
	Being confident in what they do	Cost to build psychological resilience and self esteem	£1,304.09	Personal Social Services Research Unit (PSSRU)	Used in an SROI report for Local food (Courtney, 2013). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes.