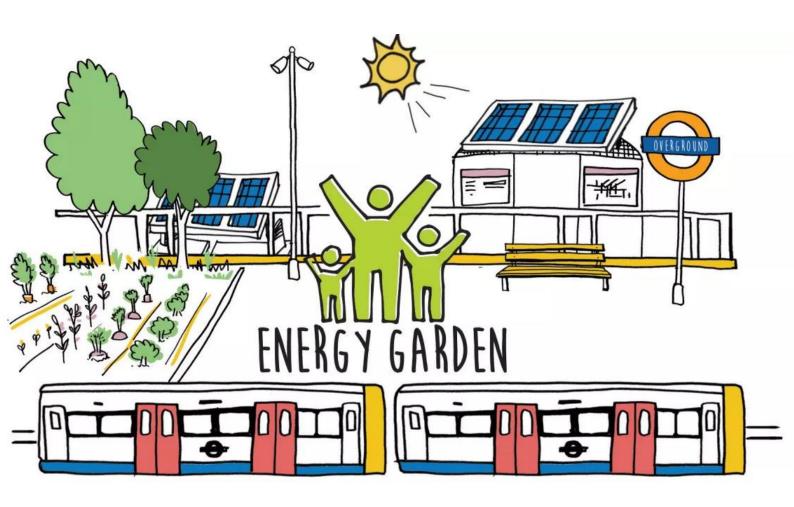
Report on the social profitability of the Energy Garden project.



Arran Dunn







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.

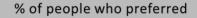
A visual summary of this report can be found overleaf.

SROI

ENERGY GARDEN



210 Active volunteers







~ 1 million commuters benefitted

£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.

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

Stakeholders Intended/unintended Inputs changes What do you think will change What do they invest?	Who has an effect on us?		More outdoor activities in	More outdoor activities in their area	More outdoor activities in their area Local community / local volunteers Time	More auditor activities in their area their area their area communities.	More auditor activities in their area More involvement in the communities Meet environmental targets. (Evaluation	More outdoor activities in their area More involvement in the communities Meet environmental targets.	More outdoor activities in their area More involvement in the communities Meet environmental targets. Meet commune with their metro's	More outdoor activities in their area More involvement in the communities Meet environmental targets. Meet or work experience.	More outdoor activities in their area More involvement in the communities Meet environmental targets. Meet environmental targets. Meet work experience. Helping them to evolve	More activities in their area their area communities Meet environmental targets. Get work experience. Helping them to evolve Financial benefit, Improve Financial benefit (Financial b
of the inputs in						б	ne legal forms)	e egal forms)	egal forms)	egal (orms)	ne egal forms)	
value Summary of activity in	NY Prs)	0	0		0	0 0	000000000000000000000000000000000000000	00 00 0				
The Outcomes (what changes) yin Description Indicator	How would the stakeholder describe the changes?	210 Improved mental health	210 Improved physical health	210 Improved competence, engagement and purpose		210 Increased trust and belonging		Increased trust and belonging Environmental improvemen of (ess CO ₂ emission) 210 Improve commute (safety)	Increased trust and belonging Endromental improvem (less CO ₂ emission) 210 Improve commute (salet 210,000,000 Improved Mental Health 1,000,000 Improved Mental Health	Increased trust and belonging Environmental improvemon (less CO ₂ emission) 210 improve commute (safety com	210 Increased trust and belonging Environmental improvement 0 (tess CO ₂ emission) 210 Improve commute (safety) 210 Improved Mental Health 000,000 Improved Mental Health they do 35 being confident in what they do	Increased trust and belonging Environmental improven (less CO ₂ emission) 210 Improve commute (sale 210 Improved Mental Health less thing on fident in w thing 35 being confident in w
nat changes)	der How would you measure it?	Questionnaire 'Health and h well-being' questions (survey questions 20a / 20b)	Questionnaire 'Health and the well-being' questions (survey questions 19a / 19b)	Questionnaire "Knowledge and skills" question - I got a chance to learn new things	Questionnaire 'Community	questions 15a / 15b)			y) ent	y) ent	ent y)	nat y) ent
Source	Where did you get he the information from?	Questioners	y Questioners	Questioners	Questioners		Pervious research (Desk research	Ψ 4	α <u>,</u> μ μ	G	[Q, "¬	
Quantity	low much hange was here?	7.69	12.53	4.77		23.30	0 23	10 0 2	14800000	14800000	14800000	148000000
Duration Fina	How long What does it last wou after end of valu activity? char (Only enter numbers)	Me 20 serv and	Economi benefits associate physical a	Cost o 20 develop course		neight more freque	mor freq 20 CO2	neighb more freque 20 Value s 20 coz pe pay to moder injury (discou	reggi frequency (20 Value pays) (20 Inju pays) (20	registration of the control of the c	neight frequency	Property of the payon of the pa
Financial Proxy Va	What proxy would you use to of value the change?	Mental health service costs per individual (anxiety and depression	Economic benefits associated with physical activity	Cost of personal development course	Annual value attributed to talking to	neighbours more frequently	meighbours more frequently Value saving on CO2 per ton	meighbours more frequently frequently Value saving on CO2 per ton CO2 per ton Willingness to pay to avoid pay	neighbours more frequently frequently on CO2 per ton Willingness to pay to avoid moderate 20 injury discounted to avoid double counting) Mental heath per frequency of the counting of the co	regishours remove frequently leaving on the control of the countrol of the cou	requently requests to pay to avoid a moderate moderate would moderate countring). (discounted to avoid double countring) and depression and	melghbours melghbours frequently frequently willingness to pay to avoid moderate (discounted to avoid double counting) and depression part and depression part appropriate (and depression part appropriate part a
Value in currency Source	What is the value V of the change? to (Only enter numbers)	1,023.06	37,839.95	717.18 F	BHPS Data 1997- 17,025.24 2003, from powdthavee (2006		65,426 F	3,084.69	1,023.06 E S 2,06 F S	3,084 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	1,347,585	1,023,084 833,98 833,98 833,98 833,98 833,98 833,98 833,98
ource	Where did you get the information from?	SROI Wiki Vois 1,023.06 Database-The Troubled Families	SROI Wiki Vois 37,839.95 Database scotland.gov.uk	717.18 REED Learning reedlearning.com	HPS Data 1997-	powdthavee (2008)	powdthavee (2008) SROI raport 65,426 Repowering (Walker, 2016)	powdhave (2008) powdhave (2008) powdhave (2008) SROI raport 65.428 Rapowering (Walker, 2016) report ref constiling on public safety on public safety 2016-report_uby- 2016-inal.pdf	SRO rapor (Walker, 2016) SRO rapor (SRO rapor) SRO rapor rapor (SRO rapor) (SRO rapor rapor) (Walker, 2016) (Room rapor) (Walker, 2016) (Room rapor) (Walker, 2016) (Room rapor) (Walker, 2016) SRO rapor - Usy- SRO rap	SROI report all consulting (AOOS) SROI report all consulting (Walker, 2016) (Walker, 2016) report net consulting on public safety (Walker, 2016) report net consulting on public safety (AOOS) (D84.89 ltd.)/www.refuge-orgouthings-grafty-grafty-weighty-grafty-weighty-grafty-gra	powdhavee (2008) SROI poor to BRapowering (Waker, 2016) report nef consulting on public seriesy and with the poor to public seriesy public ways. The poor to public seriesy and with the poor to public seriesy and the poor to public seriesy and the poor to public seriesy and the poor to poor to public seriesy and to poor to	powditravee (2008) Report paort Report per consulting (Walker, 2016) (Walker
Deadweight Attribut % % What would have Who else	without the activity?	64%	64%	60%	31%		0%					
Attribution % Who else	the change?	7%	7%	20%	26%		0%	0%	0%	0%	0% 0% 0%	0% 0% 0%
Drop Ir	drop off in au future years?	3 %0	0% £	3 %0		3 %0						
Impact Quantity times financial proxy,	drop off in and attribution future years?	£ 2,597.73	£ 156,548.00	£ 1,088.07		£ 202,953.13	7	7 8	7 s	7 8	7 8	

Social Return	Net Present Value	Present value of each year Total Present Value (PV)	Total		Investors		Employees	Tanapari, ser seriose	Toppost for London	Local governmentGovernment /Environment		Local community / local volunteers			Who do we have an affect on? Who has an effect on us?	
۴ 11	5,018,9	0.00 £ 5,518,966.49	٤	מז	ю	to	m	מז	т	m	110	to.	ъ	т	Year 0	Discount rate
11.04	3.49	0.00 £ 261,364.58 6.49	- £ 270,512.34	33	- £ 111,185.00	מז	- £ 1,984.84	· £ 20	- £ 16,505.56	י	- £ 202,953.13	- £ 1,088.07	- £ 156,548.00	- £ 2,597.73	Year 1	в
		58 £ 402,634.49 £	34 £ 431,312.13	3	00 -£ 111,185.00	מז	.84 £ 1,488.63	20.00 £ 161,316.00	56 £ 16,505.56	'n	13 £ 202,953.13	.07 £ 1,088.07	00 £ 156,548.00	.73 £ 2,597.73	Year 2	3.5%
		49 £ 388,683.17	13 £ 430,939.98	3	.00 -£ 111,185.00	מז	.63 £ 1,116.47	00 ε 161,316.00	.56 £ 16.505.56	'n	.13 £ 202,953.13	т	.00 £ 156,548.00	מיו	Year 3	
		m	150	3	rb H	מז	6.47 £	מו	m	מז	m	1,088.07 £	th.	2,597.73 £	Year 4	
		375,296.06 £ 362,428.63	430,660.86 £ 43	- 3	111,185.00 -£ 11	,	837.36 £	161,316.00 £ 16	16,505.56 £ 1	י	202,953.13 £ 20	1,088.07 £	156,548.00 £ 15	2,597.73 £	Year 5	
			£430,451.52 £	- £	-£ 111,185.00 -£	tio ,	628.02 £	£161,316.00 £	16,505.56 £	י	£ 202,953.13	1,088.07 £	£ 156,548.00 £	2,597.73 £	· 5 Year 6	
		£ 349,661.70 £ 337,837.39	429,823.50	-	111,185.00	,		161,316.00	16,505.56	,	202,953.13	1,088.07	156,548.00	2,597.73		
			£ 429,823.50	- 33	-£ 111,185.00 -	,	,	£ 161,316.00	£ 16,505.56	מז	£ 202,953.13	£ 1,088.07	£ 156,548.00	£ 2,597.73	Year 7	
		£ 326,412.93	£ 429,823.50	- 33	£ 111,185.00	,	,	£ 161,316.00	£ 16,505.56	מ	£ 202,953.13	£ 1,088.07	£ 156,548.00	£ 2,597.73	Year 8	
		£ 315,374.82 £	£ 429,823.50	- 3	-£ 111,185.00	מז	מז	£ 161,316.00	£ 16,505.56	m -	£ 202,953.13	£ 1,088.07	£ 156,548.00	£ 2,597.73	Year 9	
			£ 429,823.50	£	£ 111,185.00	מו	מז	£ 161,316	£ 16,505.56	מו	£ 202,953.13	£ 1,088.07	£ 156,548.00	£ 2,597.73	Year 10	
		304,709.97 £294,405.77 £ 284,450.01 £274,830.93 £265,537.13 £ 256,557.62 £	.50 £ 429,823.50	3	.00 -£ 111,185.00	115	מז	161,316.00 £ 161,316.00	.56 £ 16,505.56	, and	.13 £202,953.13	.07 £ 1,088.07	.00 £ 156,548.00	.73 £ 2,597.73	Year 11	
		.77 £ 284,4	.50 £ 429,823.50	3	μ	115	מז	מו	מז	מז	т	т	th.	מיז	Year 12	
		50.01 £ 274,8	23.50 £ 429,823.50		111,185.00 -£ 111,185.00	י	מז	161,316.00 £161,316.00 £161,316.00	16,505.56 £ 16,505.56	, u	202,953,13 £ 202,953,13	1,088.07 € 1,0	156,548.00 £ 156,548.00	2,597.73 £ 2,	Year 13	
		30.93 £ 265,	123.50 £ 429,823.50	÷	85.00 -£ 111,185.00	י	'n	116.00 £ 161,	905.56 € 16,505.56	י	153.13 € 202,953.13	1,088.07 £ 1,	48.00 £ 156,548.00	2,597.73 £ 2,	Year 14	
		537.13 £ 25	т	÷	μ	,	מו	מו	מז	י	m	1,088.07 €	75	2,597.73 £	4 Year 15	
		56,557.62 €	429,823.50 £	-	111,185.00 -£	י .	י	161,316.00 £	16,505.56 £	י	202,953.13 £	1,088.07 £	156,548.00 £	2,597.73 £		
		247,881.75	429,823.50		111,185.00			161,316.00	16,505.56	,	202,953.13	1,088.07	156,548.00	2,597.73	Year 16	
		247,881.75 £ 239,499.28 £ 231,400.27	£ 429,823.50	- 3	-£ 111,185.00		· ·	161,316.00 £ 161,316.00	£ 16,505.56 £ × 16,505.56		£ 202,953.13	£ 1,088.07	£ 156,548.00	£ 2,597.73	Year 17	
		€ 231,400.2	£ 429,823.50	- 3	-£ 111,185.00	110	מו	£ 161,316.00	£ 8 16,505.5	m	£ 202,953.13	£ 1,088.07	£ 156,548.00	£ 2,597.73	Year 18	

(Value per amount invested)

	Outcome	Financial proxy	Value £	Source	Rationalisation
	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
local volunteers	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 http://www.reedlearning.c om/trainingcourses/perso naldevelopment/delivering beyond-yourself	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	Environment al improvemen t (less CO ₂ emission)	Value saving on CO₂ 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 http://www.refuqe.orq.uk/fil es/Refuge-SROI-report- July-2016-final.pdf	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 http://www.hact.org.uk	Used in an SROI report for Repowering (Walker, 2016). Considered an appropriate proxy as Energy Garden could achieve equivalent outcomes.
Emp	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.