



Science for Environment Policy

FUTURE BRIEF:

# Environmental impact investment

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## Science for Environment Policy

### Environmental impact investment

This Future Brief is written and edited by the Science Communication Unit, University of the West of England (UWE), Bristol

Email: [sfep.editorial@uwe.ac.uk](mailto:sfep.editorial@uwe.ac.uk)

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## Introduction

# Environmental impact investment

*Impact investing refers to investments that intend to generate measurable social and/or environmental impacts, as well as a financial return. It is often described as 'doing good while doing well' and is part of a wider strategy to shift finance towards more sustainable projects. This Future Brief from Science for Environment Policy explores research into impact investment, with an emphasis on environmental impact investing in Europe.*



Growing money. ©Romolo Tavani, IStock, 2016.

Impact investment is reported to be the fastest growing strategy for socially responsible investment (SRI) in Europe (Eurosif, 2016). Like many other socially responsible investment strategies, it seeks to achieve positive social or environmental impacts, but it is generally differentiated by its intention to generate measurable benefits and actively measure these (Eurosif, 2014). It is used to fund a broad range of activities that tackle environmental and social problems and represents a new source of finance for charities, social enterprises and businesses with an environmental and/or social mission in addition to seeking

profit – and may offer increased employment prospects in these organisations as a result. It can also help governments fulfil their responsibilities more effectively by financing innovative approaches to public services (Social Impact Investment Taskforce, 2014).

The literature on impact investment tends to focus more on its financing of social initiatives, and it has helped fund affordable housing, care for the elderly and educational opportunities, among many other products and services. However, it seems that there is growing interest from

investors in creating environmental impact (Mudaliar, Schiff & Bass, 2016), through investments in a wide range of sectors including clean tech, green construction, land remediation, sustainable forestry and biodiversity conservation.

Analysts have pointed to growing market demand for products and services that do not simply minimise harm, but have positive impacts (Conservation Finance Alliance, 2014) – products and services which ‘**demonstrably make the world a better place**’ (Social Impact Investment Taskforce, 2014). Impact investment could help meet this demand by supporting these products. There also appears to be a good business case for impact investment. The financial return on socially responsible investment more broadly, including green investment, has been found to be comparable to conventional investments (Revelli & Viviani, 2015; Humphrey, Lee & Shen, 2012). Some studies also provide examples where financial returns are actually better for socially responsible investment than for conventional investments (e.g. Chan & Walter, 2014; Aktas, de Bodt & Cousin, 2011).

The term ‘impact investment’ is new, coined in 2007 in the USA although the concept itself is older and various other terms are used to broadly refer to the same idea; these include ‘social investment’, ‘social impact investment’ and ‘blended value’. This rapidly growing sector is diverse and encompasses a wide range of investing organisations, investees and models of finance. Charitable foundations and philanthropists were early impact investors, but there is also now strong interest from institutional investors, such as banks and pensions. Looking to the future, there is also great potential for capital for impact investments to come from the general public via crowdfunding (Lehner & Nicholls, 2014; Social Impact Investment Taskforce, 2014).

Approaches to impact investment differ depending on what is being invested in, and who does the investment. Investors who prioritise financial return over social impact are termed ‘financial return first’, and those who

prioritise social impact are termed ‘impact first’ and sit at the philanthropic end of the investor spectrum. Access to and quality of data on the impacts of impact investment is a challenge for the sector, however, and these issues are discussed in this report alongside recommendations for how to develop the sector further.

This Future Brief focuses on available research into impact investment. It should be noted that the majority of literature on this specific topic is not peer-reviewed, studies are typically small-scale and industry reports are more prolific than academic papers. It has been argued that academic research is currently hampered by the lack of large, quality datasets, although this could be said to reflect the field’s emerging nature (Daggers & Nicholls, 2016). To inform environmental impact investing in Europe, the report draws on wider literature concerning social impact investing and socially responsible investment from around the world.

## Policy context

Policymakers are looking at ways of enhancing socially responsible investment’s potential to increase the sustainability of society and business practices. For example, the European Commission’s Capital Markets Union Action Plan highlights the role of ‘well-informed investment decisions’ in contributing towards the EU’s 2030 climate and energy policy objectives<sup>1</sup> and the EU’s commitments on the UN’s Sustainable Development Goals<sup>2</sup>. The Capital Markets Union Action Plan points to green bonds in particular as a way of helping to direct capital towards sustainable investments – these are bonds (loans) that are dedicated to environmental projects. The Commission has commissioned research to analyse the potential of green bonds for resource efficiency finance<sup>3</sup>. The G20 is also conducting research, through its Green Finance Study Group, exploring barriers to green finance, in order to mobilise private green investment and facilitate the green transformation of the global economy<sup>4</sup>. Prominent policy research work underpins these developments at a global and EU level, notably the work by the UNEP Inquiry into the Design of Sustainable Financial System<sup>5</sup>.

Separately, the G8 set up the Social Impact Investment Taskforce in 2013, which is now the Global Social Impact Investment Steering Group<sup>6</sup> and whose members include 13 countries plus the EU. This group aims to promote momentum in impact investment, facilitate knowledge exchange and encourage policy change in national markets.

1 <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52015DC0468&from=EN>

2 [http://ec.europa.eu/clima/policies/strategies/2030/index\\_en.htm](http://ec.europa.eu/clima/policies/strategies/2030/index_en.htm)

3 <https://sustainabledevelopment.un.org/?menu=1300>

4 DG Environment commissioned a Study on the potential of the bonds market for resource efficiency finance (Dec 2015-Oct 2016, publication expected Nov 2016)

5 [www.g20.org/English/Important/201602/t20160202\\_2133.html](http://www.g20.org/English/Important/201602/t20160202_2133.html)

6 <http://web.unep.org/inquiry/>

7 <http://www.socialimpactinvestment.org>

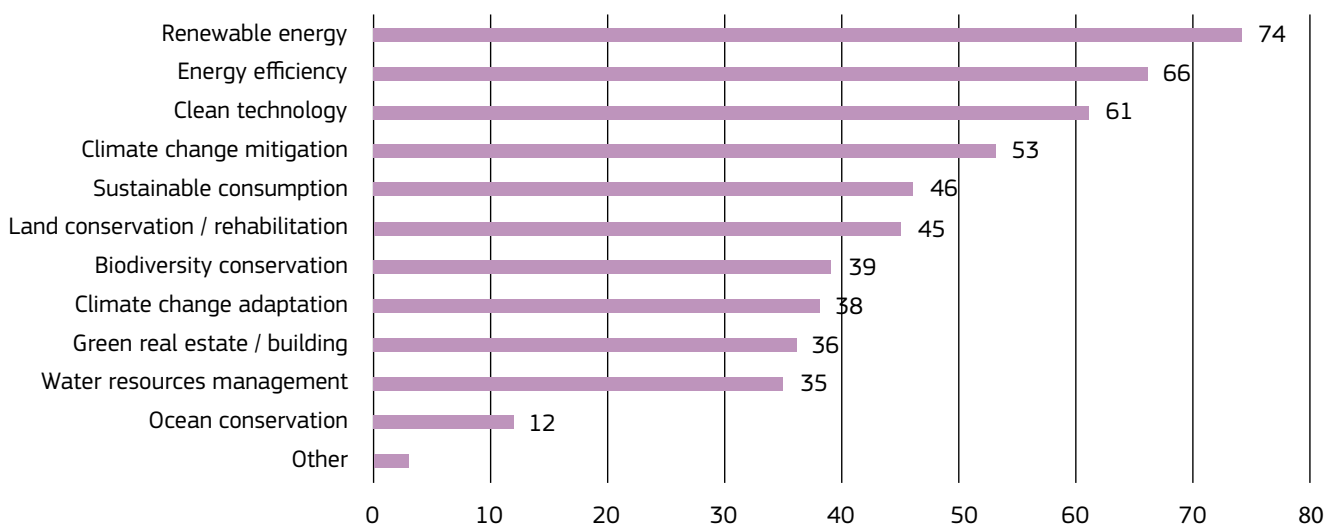
# 1. The current state of the impact investment market

The size of the impact investment market has not yet been fully quantified. However, some studies help provide a preliminary picture of the sector's growth, diversity and trends.

Globally, the impact investment market was estimated to be worth US \$109 billion (€98 billion) in 2014 – an increase from US \$86 billion (€78 billion) in 2012 (Global Sustainable Investment Alliance, 2015). The European impact investment market constituted around a fifth of this – at an estimated €20 billion in 2013 (Eurosif, 2014). Although more recent figures suggest that the European market is now worth at least €98 billion (Eurosif, 2016), this is still very small compared with other socially responsible investment strategies in Europe; ESG (environmental, social and governance) integration, for example, accounts for €2.6 trillion of the socially responsible investment market in Europe, according to the same 2016 Eurosif survey of 278 asset managers and asset owners. Under this strategy, financial managers include ESG risks and opportunities in financial analyses and investment decisions. However, with a 385% growth rate between 2013 and 2015, impact investment is the fastest growing socially responsible

investment sector in Europe (Eurosif, 2016) (this figure is also an underestimate as the Eurosif surveys exclude a number of countries and philanthropic and public money).

A recent small but global survey of 158 impact investors conducted by the Global Impact Investing Network (GIIN) (Mudaliar, Schiff & Bass, 2016) provides information on investors' environmental interests. Nearly half of all respondents (48%) primarily aimed to achieve social impact such as generating employment or improving healthcare, but around half again (47%) had both social and environmental impact goals. Five per cent of all respondents primarily aimed to achieve environmental impact. The most targeted environmental impact was renewable energy impact (47% of the total sample said they invested in this), followed by energy efficiency (42%). Figure 1 shows the full range of environmental impacts targeted. In addition, the GIIN surveyors noted an increase in the popularity of environmentally oriented strategies. In particular, the third-most selected option for investment was selling products or services that benefit the environment (54% of responses); an increase on 36% from the previous year.



**Figure 1.** Environmental impact themes targeted by number of respondents (total: 158) to GIIN's Annual Impact Investor Survey 2016. Respondents could select multiple options; the total list of themes to select from included a wide range of social themes, including access to finance, employment generation and health improvement. This figure focuses on all the environmental options for selection. Adapted from: Mudaliar, Schiff & Bass, 2016.



Most GIIN survey respondents had headquarters in either western, northern and southern Europe (32%) or North America (44%). Investment by WNS European organisations was more international than for North American organisations, with a greater focus on emerging markets; around a quarter (24%) of assets managed by WNS Europe were within WNS Europe itself, but 19.6% were in eastern Europe, Russia and central Asia, 17.8% were in Latin America and the Caribbean and 12.5% in

sub-Saharan Africa, for instance. In contrast, the majority (64.6%) of assets managed by North America-based organisations were within North America.

Although data on the state of impact investment remain far from complete, survey results to date suggest that, while it may be a small sector of socially responsible investment, it is a growing and active sector in Europe, and investor interest in environmental projects may be increasing.



Plitvice Lakes National Park, Croatia. Unsplash, CC0 Public Domain. Pixabay. <https://pixabay.com/en/plitvice-lakes-national-park-croatia-984280/>

## 2. Measuring impact – the key challenge to market growth

Measurement of impact is central to impact investment. As the G8's Social Impact Investment Taskforce put it: "the better we get at measuring impact, the more money will flow into impact investment" (2014).

### 2.1 Why measure?

Perhaps the most obvious reason for measuring impact is to understand the social or environmental outcomes of an investment after it has been made. However, analysts have highlighted a range of reasons for measurement, and this measurement helps guide decision-making at various stages in the investment process.

For instance, So & Staskevicius (2015) highlight four key objectives of measurement in their analysis of 20 impact investors' practices:

- i. estimating impact, pre-investment (during the 'due diligence' phase, where a potential investment or investee is audited);
- ii. planning impact (selecting metrics and data-collection methods to monitor impact);
- iii. monitoring impact, to help ensure success;
- iv. evaluating impact, post-investment.

Thus, as well as providing accountability to investors and increasing investor confidence in an investment, effective measurement helps investors choose investments (by picking firms with the best environmental track record, for example) and helps explain reasons behind an investment's success, or non-success, in creating impact.

There are strong business benefits to measuring impact. Through interviews with 30 practitioners (23 impact investors, six investees and one service provider), GIIN (2016) showed that impact data can help investors better understand their investees (e.g. preferences related to product and services) and drive revenue growth, for instance. It can also inform and improve the operational effectiveness and efficiency of an investee company or project, and help build reputation by earning trust with stakeholders. Some specific examples of how impact measurement has helped

business prospects are highlighted by GIIN in this study. For example, the Lyme Timber Company, a sustainable land management and conservation organisation, say they have attracted investment thanks, in part, in being able to demonstrate durable conservation outcomes of their work. Ecotrust, who invest in a range of environmental and sustainability initiatives, use data from previous investments to help inform future investments, in an effort to maximise the impact per dollar invested.

Measurement is needed to understand the 'additionality' of an investment. This refers to whether impact would have occurred without the investment. In this sense, additionality defines impact. As Brest (2014) writes: **"Just because an investee is doing great things doesn't mean that your investment will help it do more or better."**

### 2.2 Methods of measurement

There are a wide range of measurement tools and approaches used within impact investment, and these are used by both investees and investors, as well as third party certifiers (e.g. for ecolabel certification). Research has found that investors tend to use a number of techniques that are suited to their specific needs (So & Staskevicius, 2015; Mudaliar, Schiff & Bass, 2016; Reeder et al., 2015). These include tools only used within impact investment — i.e. the Impact Reporting and Investment Standards (IRIS) and the Global Impact Investing Rating System (GIIRs) (see Box 1) — and methods that are used more widely in investment and evaluation, including third party certification. Many also use their own custom methods. For example, the Conservation Finance Alliance (2014) screened 23 investment funds with potential environmental benefits (such as investment in sustainable agriculture and clean technology), and found that over 50% used IRIS's metrics and many used them in combination with custom metrics designed for a specific fund.

The most commonly used approach to measuring impact is the 'Logic Model' (Nicholls, Nicholls & Paton, 2015), which is not specific to impact investment and is used more widely to evaluate programme effectiveness. It maps what is known as a 'theory of change', that is the process and stages from input (i.e. financial capital) through to



impact and is used by GIIRS as part of their process for rating the social and environmental performance of funds and firms (see **Box 1**).

In environmental management, a range of metrics which help us understand impact (e.g. water quality) is already established. For this reason, Nicola (2013) argues that environmental projects may be particularly suited to impact investment through Social Impact Bonds (SIBs, or 'pay-for-success' bonds — see Box 2), more so than for social projects, which may be harder to measure.

## 2.3 Improving impact measurement

While there are clearly a range of tools available to measure and evaluate impact, and a number of good reasons for doing so, some issues have been raised concerning measurement and data quality. The approaches to impact measurement discussed so far tend to work well for individual, well-resourced projects. However, they are not scalable across hundreds of projects and are reasonably resource-intensive in terms of data collection. They tend to be customised to individual projects, which makes it difficult to compare project outcomes.

Many people in the industry are working to refine measurement practices, and much progress is being made. However, it has been argued that the field still has some way to go before it can provide clear evidence that an investment has created the impact it claimed it would (Nicholls, Nicholls & Paton, 2015). Researchers have pointed to issues with measuring impact and evaluating the non-financial performance of companies and funds – which are relevant to impact investment.

One major issue is ensuring trust in data on the environmental performance of investees or funds – moreover, ensuring the data are reliable, to be sure of real impact. A lack of trust in the data threatens to erode the socially responsible investment market by reducing investor confidence in green products and environmentally responsible firms, according to Delmas & Burbano (2011). Several related issues arise here: 'greenwashing',



Wind rose. Unsplash, CC0 Public Domain. Pixabay. <https://pixabay.com/en/wind-rose-north-east-west-south-1209398/>

independence, transparency, standardisation and the vast number of measurement tools in use.

Greenwashing can be considered a legitimate concern for investors, as many companies have been found to misreport their environmental performance (as highlighted by Liesen *et al.*, (2015), Vos (2009) Delmas & Burbano (2011), among others). The potential extent of greenwashing is illustrated by Liesen *et al.* (2015) who found that less than a quarter of firms within the EU's Emissions Trading Scheme reported 90% or more of their greenhouse gas (GHG) equivalent scope 1 or 2 emissions<sup>7</sup>. Further illustrating the point, only 53 firms worldwide currently report 100% of their GHG equivalent scope 1 and 2 emissions according to Bloomberg data of July 2016 (Yu, Hoepner & Adamsson, 2016). Given this extent, it is unsurprising that greenwashing is normally considered counter-productive. In other words, although greenwashing occurs partly to attract investors who are interested in environmentally responsible firms, it tends to be disadvantageous as it also reduces investor confidence in green products and environmentally responsible firms (Delmas & Burbano, 2011).

So & Staskevicius (2015) argue that rigorous measurement of impact avoids the risk of impact investing being used as merely a marketing tool for commercial investors. Various recommendations have been made for how to improve the

<sup>7</sup> Scope 1 emissions arise from 'sources that are owned or controlled by the company' and scope 2 emissions 'from the generation of purchased electricity consumed by the company'. As defined in: WBCSD (2004) The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard, World Resources Institute, World Business Council for Sustainable Development, Conches-Geneva and Washington, DC.



rigorousness of measurement. For instance, accountability and reliability of measurement could be improved if evaluation is conducted by independent third party assessors (not government, investors or service delivery agents), says Jackson (2013). In support of this argument, private investors in social impact bonds (see Box 2) have a strong incentive for positive evaluation results, as their pay-out is at risk, suggests Warner (2013).

Windolph (2011) says that independence and credibility of assessment could be increased if NGOs are used to help rate the sustainability of businesses. However, if third party assessors have strong business interests in the assessment, there may still be a conflict of business interests which potentially affects the data's reliability. Ratings agencies (who, increasingly, are also involved rating companies' environmental and social performance) wish to maintain ongoing business with their clients, for instance, which may lead to 'upward bias' in ratings. Supporting evidence of this is provided by comparisons of solicited (paid-for) and unsolicited (not paid-for) credit ratings. Past research has indicated that unsolicited credit ratings tend to be lower than solicited ratings (Poon, 2003; Bolton, Freitas & Shapiro, 2012). This indicates that assessment of investment impact will also be more reliable if it has not been paid for by the organisation being assessed, as well as independent (Hoepner, 2016). Recently, the Deep Data Delivery Standards<sup>8</sup> have been developed by financial professionals and academics to provide principles for producing and providing data for the financial sector in a sustainable manner; among its principles are financial independence of assessors from the assessed.

More transparency of methods behind impact measurement (as well as verifiable data) may also increase impact data's credibility (Nicholls, Nicholls & Paton, 2015). A lack of trust in sustainability information offered on investments, or simply a lack of information, may reduce investors' willingness to invest (Windolph, 2011). GIIRS, the only ratings systems specifically for impact investment, reports that **“criteria and weightings for each impact area, subcategory and individual question within the – GIIRS assessment are fully transparent”**<sup>9</sup>.

Hoepner (2016) suggests that the USA's Toxics Release Inventory<sup>10</sup> provides a good model for independent and reliable environmental data that could be used as part of investment screening processes. This Environmental Protection Agency (EPA)-led programme measures and publically reports pollution emissions from individual firms and is known to be used by investors when making investment decisions which are based partly on the environmental performance of investees (Connors, Johnston & Gao, 2013).

Some argue that standardised tools for assessing non-financial performance that are widely recognised make it easier for investors to compare investments – to see which is the best performing (e.g. Chatterji & Levine, 2006; Eurosif, 2014). Others question the benefits of, and need for, standardised tools; indeed, as mentioned, customised tools are often used. In a survey of well-established impact investors from 16 EU-based organisations who manage funds (Reeder *et al.* 2015), some investors felt that standard indicators or benchmarks can be misleading, given the specific economic, political, socio-cultural and ecological contexts for different investments. The multitude of metrics for assessing social and environmental performance may also add to investor confusion, say Chatterji & Levine (2006), by making it difficult for investors to identify which measures are most valid and which best meet their ethical preferences.

Studies have highlighted examples of investments where measurement activity is limited and focused on the pre-investment due-diligence stage, with little or no measurement during the post-investment, evaluation stage. This tended to be the case in forest and biodiversity conservation impact investment, according to research into four international case studies (concerning private investments in Latin America, Asia and Africa), where impact measurements were generally not required by investors (Peiffer & Klimpel, 2016)<sup>11</sup>, as well as in Reeder *et al.*'s interviews with EU investors (2015). Without evaluation, it is not possible to understand what an investment's true impacts actually are. Reasons given for

8 <http://svl-deepdata.appspot.com/>

9 <http://giirs.nonprofitsoapbox.com/about-giirs/how-giirs-works/159>

10 <https://www.epa.gov/toxics-release-inventory-tri-program>

11 Published results of this project are forthcoming (expected 2017), and will be presented beforehand at the Conference of the Parties to the Convention on Biological Diversity, Mexico, December 2016. Research project title: Impact Investments as innovative sources of finance for forest and biodiversity conservation, conducted by OroVerde and the Global Nature Fund, funded by the German government. [www.regenwald-schuetzen.org](http://www.regenwald-schuetzen.org) [www.globalnature.org](http://www.globalnature.org)

not evaluating include: the cost of evaluation (which would diminish investors' financial returns), its complexity, the belief that funds could be better spent in other ways and a lack of impact measurement skills in investment managers, who tend to be drawn from the mainstream financial sector. Peiffer & Klimpel's environmental case studies found examples of public funds financing evaluation, instead of private investment.

Other research which has also suggested that existing measurement tools may be insufficient and challenging to use include Glänzel & Scheuerle's interviews with 19 social impact investment actors (funds, advisors and social entrepreneur investees) in Germany (2015). They found that evidence of impact was difficult to produce due to a lack of tools to grasp **outcomes** (such as improved wellbeing) of the impact and to clearly link the impact to the investees' work. Evaluating and reporting impact were also considered too time-consuming for social entrepreneurs.

Looking at the bigger picture, extensive data that track financial returns over extended periods for impact investments, together with measurable social and environmental impacts, are yet to be produced (Ormiston *et al.*, 2015). This is an important avenue for future research which could be fulfilled if standardised forms of measurement and benchmarks were available (Hoepner, 2016).

While there are clearly strong reasons for measuring the impact of investment, research to date would suggest that these are not always fulfilled. In addition, despite the wide range of measurement tools on offer, it may be difficult for investors to always appreciate – or believe – the true impact of an investment. Transparency, independence and standardisation could help resolve these issues and, in turn, boost the impact investment market.

#### BOX 1.

### Standardised impact investment assessment

Two standardised systems, developed specifically for the impact investment industry, are widely used around the world as part of efforts to assess impact. The first, the Impact Reporting and Investment Standards (IRIS) initiative of GIIN, provides a 'catalogue' of social and environmental metrics. Users can select metrics to illustrate the environmental and social impact of an investment. As well as metrics for the impact of a product or service, there are metrics for an organisations' operational impact (e.g. of day-to-day business activities, and on employees and the environment). Environmental metrics include biodiversity conservation, energy and fuel efficiency and natural resources conservation.

<http://iris.thegiin.org/>

The second system, the Global Impact Investing Rating System (GIIRS), is a third-party assessment system that measures the social and environmental performance of funds and firms who are seeking impact investment, and provides analytics as well as certification, for comparison. For example, a company which scores very highly for impact would receive a 'platinum' certificate, which may increase its attractiveness to investors. It is a social and environmental equivalent to credit ratings systems which are commonly used to financially assess investees.

<http://b-analytics.net/giirs-ratings>

BOX 2.

## Social impact bonds

Social impact bonds (SIBs) feature heavily in literature on impact investment. They provide a model for private investment in public services and are also known as ‘pay-for-success’ or ‘pay-for-performance’ contracts. They are not to be confused with traditional bonds and are better described as contractual obligations. Only a relatively small number operate around the world – the UK has the largest number of social impact bonds, with 32 currently in operation. To date, they have focused on providing social services, but they also have good potential to be used for environmental projects (see ‘Environmental impact bonds’, below).

Social impact bonds essentially work in the following way: private investors (via an intermediary) provide upfront funding to government for a service or intervention to address a social problem. The intermediary also coordinates the service provider. If the service is successful in its aims (i.e. it achieves a pre-defined level of impact), then the government provides the investors with a financial return. This payment is funded, at least partly, by the longer-term cost savings to government that arise from the service’s positive outcomes. To date, there appear to be few evaluations of social impact bonds’ impacts, but those that have been evaluated (Peterborough Prison (see below), London Homelessness and New York Riker’s Prison) have been ‘somewhat successful’ (Flynn, Young & Carnett, 2015)

### Peterborough Prison: an illustration of a social impact bond

The world’s first social impact bond was piloted in 2010 in the UK, and has received much global attention. It was designed to reduce levels of re-offending by offenders released from Peterborough Prison. The UK Ministry of Justice received £5 million (c. €5.5 million) funding from a number of investment organisations, via an intermediary, for a rehabilitation programme. If re-offending rates across all participants fall by 7.5%, compared with re-offending rates among a control group (similar people in other parts of the country), then the investors receive a ‘refund’ plus profit from the Ministry of Justice. Interim results suggest that investors may be on course to receive this payment in 2016, with an 8.39% reduction in re-offending rates reported in 2014 by Jolliffe & Hedderman. The anticipated savings associated with the entire scheme have been calculated at approximately £44 million (c. €49 million).

### Environmental impact bonds

The social impact bond model of impact investment has not yet been applied to environmental issues. However, Nicola (2013) says there is strong potential for ‘environmental impact bonds’ for three reasons:

1. Standardised environmental metrics already exist (e.g. metrics for water quality used in environmental monitoring) which can be used for impact bonds, or can be developed more quickly than social impact bond metrics
2. Revenue streams are a regular occurrence for natural resources
3. Future environmental impact bonds may not depend on government regulation

Nicola outlines hypothetical environmental impact bonds, to show how they could be applied. For instance, in the case of a stormwater management plan, which removes impervious (non-absorbent) structures, the local authority (Philadelphia, USA) could draw up an environmental impact bond which stipulates that repayment will be made to investors on the basis of the number of square feet of impervious structure removed. The more square feet removed, the greater the payback.

## 2.4 Impact investment case study: sustainable teak plantation, Panama

Brain Forest, also known as Palmas Bellas Farm, is a teak plantation in Panama which is funded by impact investors from around the world, including from Europe. It is managed to generate a range of environmental and social benefits and provides an example of how impact investment can help meet the UN's Sustainable Development Goals.

It has been established on land where rainforest once stood, but was cleared to create farmland for cattle. Most other plantations are monocultures, but Brain Forest combines teak (a non-native species) with native commercial species. Just over half (55%) of the land is dedicated to teak. The remaining land is for native species, conservation and other land uses, such as fire breaks and road access.

Investment is mainly in the form of equity (shares). Investors are told they can expect to receive a financial return of 8.5–10% (IRR – internal rate of return) over 25 years, which is achieved through sale of timber.

A number of environmental impacts are measured and reported to investors. These include impacts on climate change (via CO<sub>2</sub> absorption), biodiversity, habitats, soil and hydrological function (filtering water). In addition, the project aims to create social impact by providing employment, training and quality housing for local people in this remote area.

Measurement is conducted by both the forest manager and the investors, as well as third parties, such as NGOs. A combination of measurement systems are used. These include the measurements required for FSC and B Corp certification – which also provide a signal to investors that the manager, Futuro Forestal, meets certain environmental and social standards.



The Brain Forest, Palmas Bellas teak plantation, Panama, [Futuro Forestal](#).

Recent evaluation, conducted by a local conservation NGO, ANCON, suggests that wildlife is returning to the area. It identified a number of plant and bird species at the plantation including seven vulnerable bird species protected by CITES – one hummingbird, three raptors and three parakeets/parrots. Anecdotal evidence is also encouraging; an ocelot was recently sighted for the first time in the plantation, for instance.

Futuro Forestal acknowledge the challenges of measuring impact and describe the plantation as a 'living laboratory' for developing measurement methods. Specific challenges they cite include cost and a lack of baseline in tropical forests from which to measure progress; this contrasts with European forests, which have a clearer baseline thanks to many years of study and quantification.

[www.futuroforestal.com](http://www.futuroforestal.com)

**Source:** Eke (2016a, 2016b); ANCON (2016).



Ocelot (*Leopardus pardalis*) Ana\_Cotta, 2008 [Creative Commons Attribution 2.0 Generic](#)



## 2.5 Impact investment case study: green buildings, UK

Picture House Court is a residential housing development in the city of Bristol, UK, currently under construction. The 26 homes are being built to Passivhaus standards and will require very little energy for heating (needing around 90% less energy for heating than a conventional home). Hot water will be generated from solar panels. The Passivhaus standard predicts a reduction in CO<sub>2</sub> emissions of 50-80%, compared with the average UK dwelling, with associated benefits for air quality. Social impact is also sought in the sense of occupant wellbeing (providing homes that are comfortable for residents), lower utilities bills thanks to minimal energy requirements for operation (expected to be 60% less than for a new dwelling built under the latest building regulations) and minimal maintenance costs.

Funding for the homes comes from Bridges Ventures, a fund manager who specialise in sustainable and impact investment, and who invest in buildings which demonstrate 'environmental leadership'. They receive investment in the form of equity from institutional investors who share their social and environmental values. The investors receive a financial return upon the sale of the properties.

The fund manager works closely with a developer in the planning and development of Picture House Court and assess its impact. They have contracted an external Passivhaus consultant to guide the very technical design and construction specifications of the development. It is hoped that the homes will receive official Passivhaus certification once complete, which would be awarded through third party assessment.

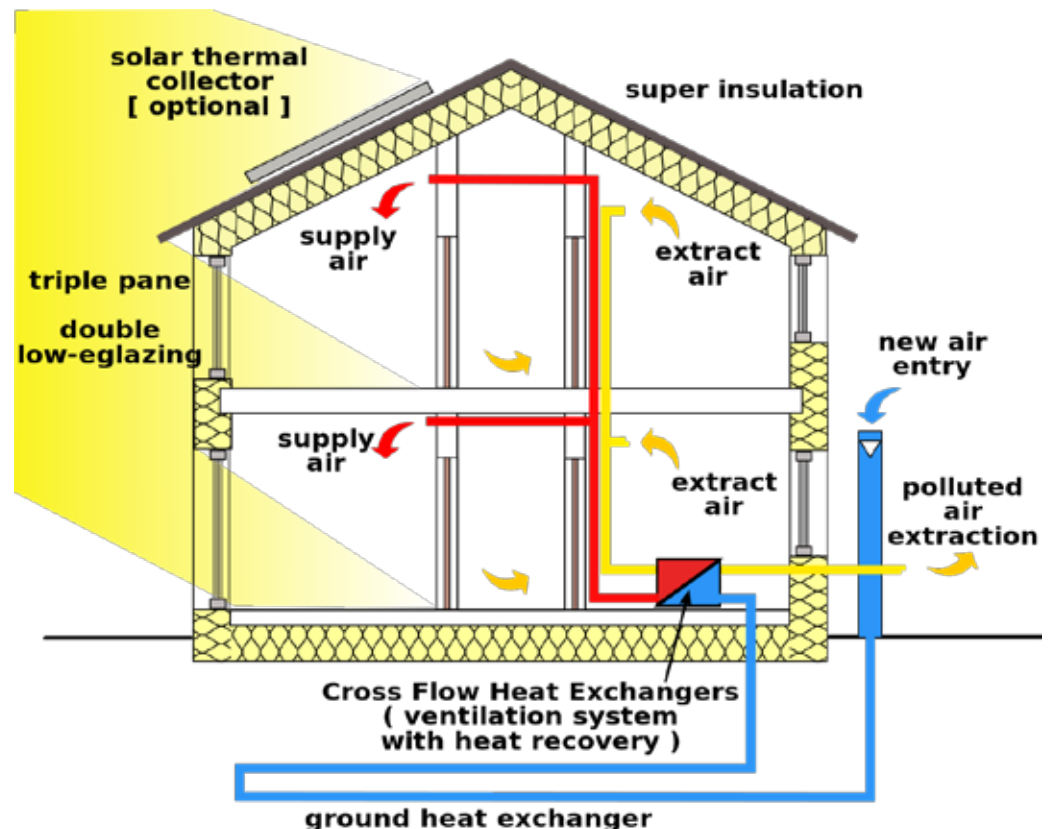
The fund manager assesses environmental additionality on property investments by comparing the impact of their

properties with the impacts of average building types in the UK, the prevailing buildings regulations and local planning requirements. They provide their investors with an annual 'scorecard' which indicates the various and changing impacts of their investments. As well as using standard methods for assessment, they have developed their own methods which account for the specific context and impacts of their buildings.

One issue with impact investment can be ensuring continued impact once investment has been exited, in this case, when the homes have been sold. For this reason, the fund manager provides guidelines to purchasers on how to optimally operate their home in order to minimise future environmental impacts. Impact is thus achieved through the collective efforts of the fund manager, developer, design team and residents.

<http://bridgesventures.com/>

Source: Rodriguez (2016)



## 3. Further challenges in impact investment: reducing risks and improving skills

To expand the impact investment industry and encourage significantly more institutional investors, continued infrastructural developments and changes to working practices may be needed. As discussed in the previous section, improving how we measure the impact of impact investment is essential to ensuring trust in the sector, and hence to growing this promising form of investment further. Some other important considerations relate to reducing risk, building staff skills and developing more collaborative ways of working; these are discussed in this section.

### 3.1 Reducing risks in impact investment: liquidity and the public-private burden

It is important to reduce market risk for investors, particularly liquidity risk. This refers to the risk of an investor being unable to sell on an investment — an investment that is hard to sell is ‘illiquid’. Liquidity is needed to enable ongoing investment and increase investor trust. It is not specific to impact investment and is highlighted as an issue in investment more generally in the EU’s Capital Markets Union Action Plan. Liquidity can be influenced by many factors, including the number of trading platforms and ‘market-makers’, the transaction costs of each investment and overall market transparency (Bridges Ventures, n.d.). As impact investment is in early stages of market development, investors may be required to accept a lower level of liquidity than normal (Ormiston *et al.*, 2015).

Mendell & Barbosa (2013) consider that a lack of ‘secondary markets’ for impact investments reduces their liquidity. Secondary markets are effectively resale markets, and provide opportunities for investors to ‘exit’ (sell) investments by trading them with other investors. Secondary markets contrast with primary markets where investors buy brand new investments, floated for the first time, directly from issuers. Both primary and secondary markets are provided by stock exchanges.

Non-profit social enterprises are common targets for impact investment, but they are unable to issue shares (and so generally receive debt investment, such as bonds), which limits trading options. A number of ‘social stock exchanges’ specifically for impact investments have emerged around the world, which provide a marketplace both for primary and/or secondary transactions, but not all accept non-profit enterprises (the UK’s Social Stock Exchange does not, for example). Mendell & Barbosa conducted a preliminary evaluation of five impact investment stock exchanges in 2013 (note: at the time of the study, not all had been officially launched): Nexii in Mauritius, the Social Stock Exchange in the UK, the Impact Investment Exchange Asia (IIX) in Singapore, the SVX in Canada and the KSIX in Kenya. At the time of the study, only IIX was considering trading bonds for non-profit enterprises, and only three provided a secondary market as well as a primary market. (Nexii and IIX have since merged<sup>12</sup>.) Flynn, Young & Carnett (2015) note that, despite the number of social stock exchanges, they have received very little evaluation by researchers.

Mendell & Barbosa propose that a range of options for exit strategies and secondary markets is needed for impact investments, which do not follow the standard model of share capital and global financial exchanges. They highlight the Community Reinvestment Fund<sup>13</sup>, a non-profit organisation in the USA, as an example of one such strategy. This provides a secondary market by purchasing as well as providing loans for small businesses. Public policy has helped create liquidity for this exchange platform; the Community Reinvestment Fund pool the purchased funds into the US government’s New Markets Tax Credit<sup>14</sup> investment funds, for example.

Researchers have also considered how financial risk is shared between public and private actors involved in impact investment. In an analysis of early social impact bonds (see **Box 2**), Azemati *et al.* (2013) found that philanthropic investors assumed most of the financial risk and little or no government payment was required unless the projects met their performance targets. Jackson (2013)

<sup>12</sup> [www.asiaiiix.com/2013/05/nexii-and-iix-integrating-global-efforts-for-greater-impact/](http://www.asiaiiix.com/2013/05/nexii-and-iix-integrating-global-efforts-for-greater-impact/)

<sup>13</sup> [www.crfusa.com/](http://www.crfusa.com/)

<sup>14</sup> [nmtcoalition.org/fact-sheet/](http://nmtcoalition.org/fact-sheet/)



Wind turbines in Oiz Eolic Park, Basque Country. ©Mimadeo, IStock, 2016.

argues that in the future, governments may need to share more of the failure risk for social impact bonds to reach their full potential, as it may become harder to persuade investors to take on such risk. This is because the pool of capital available will become limited, as will the number of policy areas where it is possible to convince investors to take on all of the risk. Conversely, private impact investors in environmental projects assessed by Peiffer & Klimpel (2016) were less likely to assume financial risk than public bodies involved. In this study ‘losses were socialised and gains were privatised’. In either case, both these research results suggest that there may be a need to share financial risk between public and private bodies more equally in future.

### 3.2 Skills building and collaboration between impact investment actors

Impact investment requires a particular skillset: financial expertise together with expertise in the target social or environmental areas, and an ability to understand and work with diverse stakeholders across the social, public, and private sectors (Ormiston *et al.*, 2015). Researchers have highlighted specific areas where expertise needs

developing, for example: governments need specialist personnel to contract social impact bonds, according to Azemati *et al.* (2013), and the same would be true for environmentally themed investments. Also, investment institutions draw staff from mainstream finance who may not have the skills to do evaluation or fully understand impact investment. Therefore, they should consider educational opportunities, engagement with new consultants or intermediary organisations and their future recruitment choices (Ormiston *et al.*, 2015).

Studies have also highlighted investees’ lack of ‘investment-readiness’ and financial knowledge (Mendell & Barbosa, 2013; Glänzel & Scheuerle, 2015; Seddon, Hazenberg & Denny, 2013; Peiffer & Klimpel, 2016). For instance, in interviews with 14 German social entrepreneurs, Glänzel & Scheuerle found that most lacked the skills to put together a business plan. In interviews with 16 UK social entrepreneurs, most lacked broad management skillsets, robust and clear governance structures and detailed long-term financial projections – which are considered extremely important for investment-readiness (Seddon, Hazenberg & Denny, 2013). E.T. Jackson and Associates





Squid, Croatia, Mediterranean. MartinStr. CC0 Public Domain. Pixabay. <https://pixabay.com/en/squid-octopus-underwater-animal-225422/>

Ltd. (2012) suggest that social stock exchanges improve investment readiness of social ventures as, in order to be listed, businesses must meet well-defined criteria.

‘Cultural’ and background differences between investors – who have a commercial finance logic – and social entrepreneur investees – who have a social sector logic – are impeding impact investment, suggest Glänzel & Scheuerle (2015). These differences could be addressed by intermediaries, such as fund managers and investment advisors, but such intermediaries are scarce in impact investment, according to Glänzel & Scheuerle’s research. Intermediaries can also support the market by bringing investment opportunities to the attention of investors and reducing transaction costs of each investment through economies of scale, as can social stock exchanges.

Writing about impact investment in marine conservation, Bos, Pressey & Stoeckl (2015) say that two-way capacity building is needed because investors typically lack technical, ecological and conservation knowledge, and marine conservation practitioners typically lack expertise in investments. They therefore call for increased collaboration between sectors and disciplines to encourage marine investment. Non-profit organisations, such as NGOs, could play a role by acting as advocates to increase understanding within government agencies and request changes to policies, and also provide technical assistance to businesses, they suggest.



## 4. Summary and concluding remarks

Impact investment is a burgeoning field and, as such, still has a limited evidence base. The small number and small-scale nature (indicated in this report by number of interviewees, respondents or case studies in each study) of existing studies means that it is hard to draw strong conclusions from the research about impact investment and the environment. However, available evidence discussed in this report suggests that it: provides a means of channelling private investment into green projects, can help governments, charities and green-minded businesses meet their goals and offers a viable business opportunity for investors who seek to achieve environmental and social good.

Although impact investment is presently a small industry within socially responsible investment, surveys indicate that it is growing in popularity around the world, including in Europe. A wide range of sectors receive impact investment, including social sectors, such as housing and healthcare. However, environmental sectors also appear to be increasing in popularity as targets for investment, especially sectors concerned with energy and climate change. All environmental areas are possible targets for investment, however, including nature conservation, water management and forestry.

A number of themes emerge from the research literature, which are worthy of further consideration in order to develop this sector. Measurement of impact is a key topic, including the questions of how to ensure reliable impact data and measure additionality. Many assessment tools and techniques are available, which provide important information for investors, but it has been argued that they could be improved further. Additionally, full evaluation is not always conducted or by independent evaluators. These factors may limit the transparency and accountability of investment. The ongoing development and refinement of methods will thus develop the impact investment sector.

Market risk also needs to be reduced if the industry is to grow from its current small state. Liquidity risk could be reduced by introducing more opportunities for impact investors to trade investments, which include models of financial exchange other than stock exchanges, and by increasing transparency, research indicates. Financial risk could also be shared more evenly between public and private actors, it has been argued.

As a new field, new skillsets are required of actors in impact investing – by both investors and investees. For example, investors and investment managers may need to develop evaluation skills, potential investees may need to develop the business skills to attract investment and investees may need to learn skills for evaluating and reporting impact, and in a way that ensures impacts (e.g. GHG emissions) are fully reported. Effective collaboration between groups and sectors – including government, finance, business and NGOs – could also help actors learn from each other.

Policymakers have a key role in creating a more conducive environment for impact investment to thrive, by supporting market infrastructure and mechanisms. Just a few examples of how this could be achieved, as suggested by research in this report, include: commissioning social/environmental impact bonds, supporting transparent and reliable sources of impact data, supporting the set-up of social stock exchanges and secondary markets for impact investments, and helping businesses and social ventures become more ‘investment-ready’ through training and start-up funds.

The Social Impact Investment Taskforce (2014) has suggested that impact investment could easily start to move from a niche sector into the mainstream, in a similar way that venture capitalism did in the past. This could be achieved if just a small fraction of the money currently in mainstream environmental, social and governance investment was shifted into impact investment. Together with the continually growing momentum and interest in impact investment, the proposed developments outlined in this report could help ensure that this promising sector reaches its full potential in contributing to a greener society and economy.



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