

NEWS

PROJECT

IGNITION - Innovative financing and delivery of natural climate solutions in Greater Manchester

Greater Manchester, United Kingdom

TOPIC

Climate adaptation

EDIT 22 JULY 2021

BY BIRGIT GEORGI, UIA EXPERT

# The long and winding road to financing nature-based solutions

See on UIA website



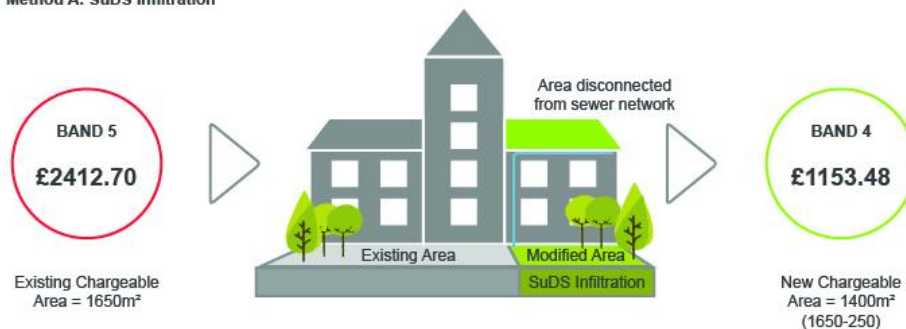
Unlocking innovative sources of finance for nature-based solutions is a critical but challenging goal facing many city regions across Europe.

Just before the start of the Covid-19 pandemic the UIA funded IGNITION project set out to explore innovative financing schemes for scaling up nature-based solutions in Greater Manchester, to provide the city-region with the uplift of green infrastructure needed to deliver climate resilience. It is widely recognised that there is not enough public and philanthropic money available to fund new green infrastructure. However, when developing the proposal for IGNITION in 2018/2019, the team could not imagine all of challenges associated with the pandemic and bridging the gap between the benefits delivered by nature based solutions and private investors.

## The first funding stream model and its limitations

The first financing model explored by the team was based on the savings made through a surface water charge discount by installing Sustainable Drainage Systems (SuDS) and had looked a straightforward enough approach. Although the team found that the discount is able to deliver a return on investment, risk levels around securing this for a sufficient payback period has proved a major blocker for investors and necessitated a revised approach to be developed and adopted. Back in 2019, when I talked with the project lead about challenges in innovative projects, we had a rather theoretical but common understanding that there will be some stumbling blocks. Two years on: How did the task of developing innovative funding streams work out?

Method A: SuDS Infiltration



The original water charging band model

The innovative business models and financing mechanisms developed should go beyond business-as-usual funding options such as municipal budget and grants. A case for the first funding stream has been developed and

successfully implemented in the schoolyard of Moorlands Junior School in Manchester. Greenspace including SuDS to mitigate flooding have been established and as a result students enjoy a much more pleasant area to play and learn in. The financing model is based on the calculation that the property owner will have savings in water charges (by removing or slowing the flow of water into the wastewater network), which can be used to offset the upfront investment in SuDS, over a number of years. However, while the model has run successfully for Moorlands Junior School, other public and private actors hesitate to take it up. What is the problem?

## The challenges are rooted in different factors

The IGNITION team is confident about the high and multiple benefits nature-based solutions can provide for climate resilience and other areas. In the project's evidence database they collected over 1,000 pieces of evidence on benefits such as climate, air quality, water quantity and quality and local economy. For each evidence base the quantitative benefits have been summarised where possible. While these numbers are convincing for experts, they have come to realise that the numbers alone are still not sufficient for investors to prefer nature-based solutions over more conventional engineering solutions.

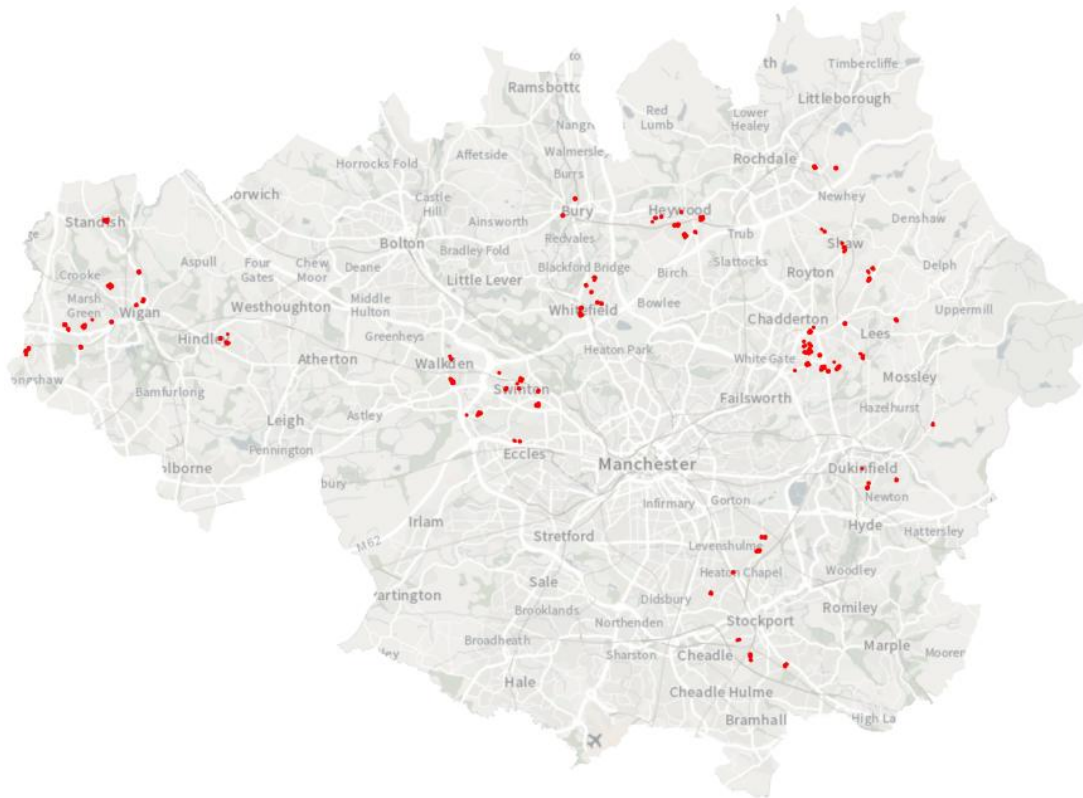
**Limited knowledge on the benefits of NBS** exists among potential public and private investors such as local authorities, businesses, schools and property owners makes these stakeholders hesitant to commit to investing in NBS. IGNITION's citizens' engagement, park user survey and workshops with different stakeholder groups revealed that some benefits, such as those for nature, are well understood, but other benefits on mitigating heatwaves for example are less known. This may also lead to lack of trust that these solutions can work sufficiently under climate impacts such as flooding events. Investors that are focused on high returns simply do not want to take the risk.

**Benefits are not easy to grab.** The stakeholders investing in nature-based solutions do not necessarily take advantage of the whole range of the benefits available. Many stakeholders (students, citizens, health and social services, nature conservationists, water utility companies, flood protection, highway authorities, nearby property owners and businesses) can actually benefit, but they are often not the ones who make the investment. Even where there is an understanding and general willingness to pay, such as in health services, there is not yet a procedure in place to finance public greenery across municipal departments. In the case of Moorlands Junior School, other organisations in the local neighbourhood also benefit from the scheme through reduced flooding, fresh air and heat reduction, but would not pay for these benefits. These complex stakeholder interactions are a challenge when attempting to share costs and benefits.

**Uncertainty on realising intended benefits and returns.** The lack of binding targets and regulations, such as local water retention and flood prevention targets hamper the broader uptake of nature-based solutions. If they are not obliged to through targets and conditions, most property owners are reluctant to invest in NBS due to the risk of no return on investment. If the water charging band model developed through the first funding stream was applied at other sites, benefits and returns will, in most cases, materialise only after 10 -20 years which is too long for many beneficiaries. In addition, there is no guarantee that these charges will remain throughout that time period, reducing confidence in the model even further. These challenges cannot be easily overcome within IGNITION alone, as it requires a step change in regulatory procedures.

## Pulling the lessons learned together and revising the approach

**Focussing on the sites in need rather than a generic model** Changing the perspective and turning the water charging band model approach around is seen as a way forward. Moving the original focus away from the potential benefits of the property owner and investors towards the benefits to the water company. It is a shift from a generic business model that is not bound to any specific location to a site-specific approach. In order to test this, the team has identified a list of 111 sites across Greater Manchester that, if SuDS were to be installed, would provide a positive impact on sewer flood risk. Mitigating this risk (that will even increase in the future) will save costs for the water company in the form of avoided fines and upgrades of technical sewerage infrastructure. Modelling the benefits and impacts appears to be crucial to convince and successfully influence the water company of the merits of this approach. Despite this change in focus, the original charging band model is being explored to supplement the new model by providing incentives to site owners.



Map of Greater Manchester with the 111 selected sites

**Co-investment rather than single beneficiary investment.** The team has come to realise that nature-based solutions are not always the most cost-effective solution if just one benefit is considered in the business model. However, if a multitude of benefits can be included in the scheme, then it can become cost-effective. The crucial and not always simple task is to monetise these benefits as far as possible.

In this regard, the team tests co-investment approaches to capitalise the different benefits and pull the various beneficiaries together as investors, thus maximising the overall benefit. To increase this confidence, the team has put several elements together. The project’s evidence base lists the quantitative benefits of nature-based solutions for climate adaptation, environment and health. IGNITION’s Salford Living Lab with a combination of nature-based solutions supplements this with hands on experience and real-life data. The recently inaugurated lab has immediately encouraged a property owner of a shopping centre in Salford to integrate a green roof into its new building. This came as a welcome surprise for the IGNITION team. With more nature-based solutions installed and their benefits practically demonstrated, it can create confidence and a surge in demand for these solutions.



The Salford Living Lab demonstrates tangible solutions – The recently established green roof

Photo: Sam Hartley

The co-investment approach will be tested on SuDS by building an exemplary business case at a neighbourhood scale where the water company, local flood authority and highways authority can collaborate. This model has the potential to be expanded as the targeted stakeholders work across the whole region and multiple sites could potentially benefit. The exemplary business case will therefore be built in a replicable way.

A current challenge to this approach is low awareness within local authority highways teams. Their infrastructure projects are of large scale and convincing them of the benefits of integrating nature-based solutions would enable SuDS to spread at a large scale. A business case is needed to enable learning and shift the existing mindset. Another challenge is to identify when nature-based interventions can be included in planned and ongoing upgrade and maintenance projects, with sharing of data essential to facilitate an efficient synchronising of investments between the different stakeholders.

Finally, the IGNITION's citizens engagement survey and the park survey has revealed that residents not only value greenspace highly and request more, but are willing to donate money and to pay for certain services. The team will therefore explore a park's foundation approach where such spending and fees for licences to café owners, rental of leisure equipment and other services provided in parks can be collected and then used to finance SuDS.

See also : [Case study on co-investment on SuDS in the Dales Brow park](#)

## In summary - the way to go

The development of new innovative financing models for nature-based solutions has been shown to be more complex than originally thought. Important lessons have been learnt:

- Creating confidence with the multiple potential investors is crucial.
- Monetising different benefits including avoided costs can be a strong argument for investors.
- Often only the focus on multiple benefits and engaging multiple beneficiaries will ensure cost-effectiveness of nature-based solutions.
- Co-investment schemes appear promising.

On a meta-level, the process so far has shown the importance of UIA funding in creating sufficient space for exploring and testing different ideas and opportunities to learn, revise and finally achieve the project's targets by unlocking truly innovative solutions. It is a precious opportunity that conventional projects do enjoy.

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