“When policies attack!: Adapting pilot evaluations to changing political landscapes.

Claire Murray, Energy Saving Trust, London, UK
John Fawcett, Databuild Research and Solutions Ltd, Birmingham, UK

Abstract

The Pay As You Save (PAYS) pilot was delivered between 2009 and 2011. It was an exciting and ambitious trial of a range of financing repayment options to help householders to overcome the barrier of the upfront capital cost of measures and incentivise householders to install energy saving measures in their homes.

The pilot provided up to £20,000 per property and a free home energy assessment to enable the installation of energy efficiency and microgeneration measures.

Five organisations, from both public and private sectors, were selected to run a pilot scheme in five different areas of the UK. The pilot schemes all employed different delivery approaches, repayment options and use of incentives.

The Energy Saving Trust (EST) managed the pilot on behalf of the UK’s Department of Energy and Climate Change (DECC) and the Department for Communities and Local Government (DCLG). The Energy Saving Trust commissioned Databuild Research and Solutions Ltd, and worked with them closely, to deliver the evaluation of the pilot.

A change in Government halfway through the pilot’s delivery timeframe saw the policy landscape change. This presented clear risks to the perceived relevance and take up of the evaluation findings.

This paper discusses how to ensure that evaluations of programmes can remain relevant and influential against the context of a changing policy landscape. In the case of the PAYS study, though the policy context changed, the evaluation steering group successfully ensured that important lessons were learnt through introducing new research elements and framing the findings in a way to maintain their traction and relevance to future policy.

Background

The Climate Change Act (2008) requires that by 2050, the UK’s annual CO_2 emissions should be reduced by 80% compared to 1990 levels. Domestic (household level) energy use is responsible for over a quarter of UK CO2 emissions which contribute to climate change.

In order to achieve this, it will be necessary to take every opportunity, where practical, to achieve the best possible levels of energy efficiency in homes. This is not an easy target to meet, especially since the UK has a high percentage of old existing homes with very poor levels of energy performance. One of the main barriers reported by householders is the upfront cost of retrofitting properties.

The PAYS initiative was led by the Department of Energy and Climate Change in partnership with the Department for Communities and Local Government, and it was administered by the Energy Saving Trust.

Five different pilot schemes were set up under the PAYS pilot project. Five partners - known as delivery partners - from both public and private sectors were selected to deliver five different pilot schemes. Although different approaches were encouraged to a degree, to participate the pilots all had to be based on the following key principles:

1. 'Pay As You Save' funding of up to £20,000 per householder property for energy saving measures.
2. Free energy assessment to establish and recommend suitable measures and on-going advice to help householders reduce their energy consumption.
3. Repayment periods up to a maximum of 25 years.
4. Zero per cent interest rate.
5. Optional householder contribution.
6. Feed-in Tariff (FIT) benefits: the Government generation tariff benefits will be included within the payback savings (in £) when solar photovoltaic panels installed.

The table below describes how each pilot operated around the key principles and the main differences between pilots.

Partner (Partner abbreviation)	Pilot Description
B&Q UK and London Borough of Sutton (B&Q/Sutton LBC) Sutton, UK	B&Q UK, a leading DIY retailer, led a pilot project in partnership with the London Borough of Sutton (a UK local public authority). B&Q was the lead, managing and running the home assessment and installation process. Sutton London Borough Council managed the finance side. The PAYS finance offered was up to £20,000 per household, though there were exceptions which exceeded this amount. Customers could choose a repayment period of either 10 or 25 years. The pilot was the only pilot that included a subsidy of 40% to encourage uptake on all measures. The subsidy enabled householders to get better measure package deals and did not have to be paid back by the householder.
British Gas (BG), Surrey & Sussex, UK	British Gas, a UK energy supplier, took a holistic approach, managing both the finance side and the delivery side of the pilot. The PAYS finance offer was open to British Gas and non-British Gas customers. Finance of up to £20,000 was offered. This project aimed to test the energy supplier billing route i.e. paying via energy bills. Five package options were offered, all including solar PV measures to ensure payback could be achieved. Customers could choose a repayment period of either 10 or 25 years.

Birmingham city council (BCC), Birmingham	Birmingham City Council, another UK public local authority, operated their PAYS pilot as a part of their wider multi-million-pound Birmingham Energy Savings Scheme, designed to deliver energy efficiency and micro-generation to thousands of homes across Birmingham. Birmingham City Council managed the assessment process and installation of measures. A third party, West Midland Kick Start Partnership, provided the loan administration and financial advice services through its contractors Street UK. Finance of up to £20,000 was offered. Customers could choose a repayment period of either 10 or 25 years.
Stroud District Council /Severn Wye Energy Agency (Stroud/SWEA), Stroud	The partnership between Stroud District Council (the final UK public local authority involved in the PAYS pilot) and SWEA (a UK energy advice agency) saw SWEA deliver the energy saving expertise and Stroud District Council deliver the finance element. It was the only project to impose a cap of £10,000, as the pilot partners felt this would help the money to go further (i.e. across more customers) and would encourage customers to make a contribution to their own packages if they desired packages valued at over the £10,000 cap. Repayments were expected to be completed between 5 and 25 years.
	Gentoo Group, a registered social housing landlord, tested PAYS as a financial model for social housing retrofit, working on a mixture of void and occupied properties they owned. It was the only pilot not to target the private owner occupier. Gentoo managed the whole process for their tenants. Gentoo calculated a weekly charge for tenants to repay, ensuring this was less than the predicted weekly savings they would make. Two different packages were offered: • 20 years for package 1 in 1st year • 25 years for package 2 in 2nd year; to include external wall insulation and to offset the high cost of this measure a subsidy of up to 64% was applied. The subsidy did not have to be paid back by the householder .

Table 1. Descriptions of pilots

PAYS Evaluation approach

At the time of the pilot design, the evaluation was designed to be a combination of a *process* and *outcome* evaluation. This is because the questions to be answered related to both ‘how the pilot was delivered’ and ‘what difference the pilot made’.

A multi method research approach was taken, using both quantitative and qualitative research of the following key areas:

1. Householder research (quantitative and qualitative)
2. Householders who ceased to participate research (quantitative and qualitative)
3. Delivery partners research (qualitative)
4. Supply chain (assessors and installers) research (qualitative)
5. Analysis of administration data from delivery partners (qualitative and quantitative)

Householders were signed up to pilots continually over the delivery period of the pilot; the data collection period for this review ran concurrent to this – split into three phases - to ensure that information and lessons were captured from the start to the end of the pilot. Where possible, the majority of householders were interviewed after energy saving measures were installed in their homes, to enable data around their whole householder journey to be captured.

Change in energy efficiency policy

The UK's current coalition government came into power in 2010 and announced their main flagship energy efficiency policy the Green Deal. It is currently in development, and it will be launched in autumn 2012 across England and Wales.

Like PAYS, the policy tries to overcome the recognised and reported barrier of the cost of installing energy saving measures in homes. The Green Deal provides householders access to finance to pay for energy efficiency improvements to their home and then allows householders to make the repayments for the cost of the measures - through the savings made - through their electricity bill. By eliminating the need for householders to pay upfront for the cost of energy efficiency measures and instead providing reassurance that the cost of the measures will be covered by the savings on the electricity bill, the aim is that more householders will take action to improve the energy efficiency of their homes.

When the Green Deal was announced, the Pay As You Save (PAYS) pilot – and concurrent evaluation of that pilot - was already half way through its delivery timeframe.

Challenges of the changing policy context

Though, at first glance, the initiatives seem similar (both were solutions trying to eliminate the need for householders to fund energy efficiency measures upfront), they differed significantly in their structure.

Table 2, below, shows the main differences between the PAYS pilot and the still-developing Green Deal policy.

Theme	Green Deal	PAYS
Interest payments	There is likely to be interest attached to the financial offers, as the private sector 'market' will be offering the financial measure packages and will want the Green Deal to be commercial viable as a business model.	The financial offers were interest free.
Finance responsibility	Financial repayments will be attached to the property not the householder.	Financial repayments were attached to the householder due to constraints with legislation at the time. The coalition government have had to go through a parliamentary process to enable repayments to be attached to property.

Repayment method	Use of the energy bill mechanism to allow the householder to pay for the installation measures and also see the savings being achieved from the installations.	This mechanism could not be set up for the pilot. However, the British Gas pilot tried to simulate this approach by repayments via the energy bill route.
Finance options	Only finance packages where predicted savings are greater than repayments will be eligible.	The pilot householders were able to choose packages of measures that would not pay back within their chosen repayment timeframe. In addition, Feed-in Tariff benefits were available in PAYS to ensure a favourable payback for householders; these will not be included in Green Deal finance.
Target audience	Will be available on a large scale to all domestic (householders) and non-domestic properties across England and Wales.	Five small scale pilot projects were run by five different partners in five different areas of the country. Samples were not representative.
Consumer protection	Standard and accredited frameworks which the provision of energy saving advice, the home energy assessment, the calculation of the savings and the installers installing the measures would be covered by.	The pilot did not have an accredited framework in order for pilots to have the freedom to test different approaches. For example, partners applied different methods for modelling savings for householders, therefore the predicted savings provided to householders were not comparable across pilots. Also, partners chose their own installers in all pilots apart from one.

Table 2. Differences between PAYS pilot and developing Green Deal future policy

Concern therefore turned to the perceived relevance and take up of the evaluation findings and lessons from the PAYS pilot.

Keeping things relevant

The evaluation steering group worked to reflect the changing policy landscape within the evaluation, in the hope that this would ensure the longevity of the evaluation and achieve traction with policy makers and key stakeholders working on the new Green Deal policy. This ability for the evaluation to evolve alongside the policy was fundamental to the survival of the research.

Lessons were framed around the following three areas integral to Green Deal planning, below, to ensure valuable lessons were still learnt and the report not overlooked.

1. **A growing need to learn from the delivery process of the pilot rather than the impacts and the benefits.**

   It is still uncertain which organisations will be acting as Green Deal providers of the financial measure packages. However, it is largely expected that organisations within the private sector, such as high street retailers, DIY merchants and energy companies will be offering the financial packages. There is also the possibly that some organisations will join partnerships or consortiums to deliver Green Deal financial and measure packages, for example a local authority partnering with an energy supplier. Therefore, both policy makers and potential future Green Deal providers were keen to learn delivery lessons to pre-empt issues and time / cost drains.

2. **Householder demand and take up was seen as essential to a successful new policy.**

   There was a growing need to understand more about householders and their preferences in terms of providers, financial offers and measure packages. Concern was growing about the levels of householder demand for Green Deal and who the first types of householders may be to take up such offers. Therefore, lessons around the types of householders and their preferences on providers, financial packages and measures were vital to feed into this agenda.

3. **A growing need to provide assurance to householders of a quality service in all aspects.**

   It was recognised that an accreditation framework and standards needed to be set to ensure householders could be confident in installing measures in their home under the policy. The home energy assessment stage was a common element between both the pilot and new policy, therefore, lessons around the quality of the assessment and the installer and installation process were focused on.

In order to capture vital lessons around these three areas, the evaluation was adapted in the following ways:

- We sought additional feedback (outside of the original evaluation scope) in in-depth interviews with the delivery partners and installers in order to report on lessons around the delivery process, highlighting strengths and weaknesses and challenges from the process. These interviews also explicitly tested delivery partner views on Green Deal propositions and their thoughts on its deliverability.

- We limited the assessment of impact post installation, and focused on early short term impacts sourced from anecdotal information from householders.

- We included additional qualitative interviews with PAYS participants and other householders to test some hypothetical scenarios that emulated aspects of the Green Deal; these discussions covered the financial offer (especially willingness to take on debt that carries interest), the extent of accreditation required to reassure householders to participate, and views on repayments being attached to the property. The final evaluation report placed more weight on the findings that were most relevant to informing Green Deal. Indeed, the report concluded each section with a specific table of 'implications for Green Deal'.

Challenges of adaptation

There were a number of challenges of adapting our approach midway through the evaluation:

- **Approval** – the evaluation involved a number of stakeholders. Although most were engaged with the necessity to ensure the pilots and evaluations fed into Green Deal thinking, there was also a risk that individuals embedded in the process could resist change.

- **Comparability** – in order to test particular elements of Green Deal, some questions in the main survey had to be altered. This instantly made it much more difficult to compare across evaluation waves and provide aggregated responses or time series analysis.

- **Balancing** – as the evaluation budget had been agreed and capped, it was not possible to extend the evaluation budget to incorporate the extensive qualitative discussions. This meant that other elements of the evaluation had to be reduced in size, therefore risk becoming less robust or useful.

- **Chicken and egg** – on the one hand, we hoped the evaluation would inform decisions on Green Deal; informing a blank canvas! On the other hand, as Green Deal thinking was developing fast at the same time, we found it useful to explicitly test some of the emerging ideas; informing policy quickly and informally. There was therefore a danger of limiting the creativity of the evaluation and the proposals / recommendations arising out of it.

Findings from PAYS and lessons for Green Deal

Overall, our revised approach ensured that the evaluation findings could be valuable to Green Deal policy makers, as follows:.

1. **Delivery process:** Overall householder sign up was more resource and time intensive than initially expected. In addition, the final number of householders signed-up was lower than the original target. The key reasons found for the lower than expected numbers of sign-ups were:

- Converting interested consumers to 'signed-up' householders took time and effort. The partners interviewed reported that they invested more time and effort than originally anticipated into customer care, setting up the PAYS agreement and managing the energy saving installations. Partners estimated that to provide an adequate level of advice, support and hand-holding to take householders through their journey, to the point at which they installed energy saving measures, could take up to two to three days per household.

- A higher than anticipated average package cost which resulted in a reduction in the number of packages that could be provided within the designated funding available.
- The pilots experienced a number of delays. This was both in setting up internal new process to manage the pilot and the financial repayments, and also signing up householders.
- Several versions of the repayment schedule had to be produced by partners for householders while they were still making their decisions on which mix of measures to include in their final package. This all took time and staff resource.
- In addition, some pilot partners found it difficult to source highly skilled trades-people and energy assessors for their pilot project. Energy assessors (advisors) working on the pilot required an advanced level of experience and knowledge in order to provide detailed advice on energy efficiency and micro-generation measures, as well as basic financial advice.

The Government and the Energy Saving Trust committed to publishing the lessons from the evaluation report in the Pay As You Save Pilot Review, which is available to all online. Government also shared these lessons with potential Green Deal providers, which they have been in discussion with. Government and organisations are looking at avenues of how skills of tradespeople can be improved to ensure there is a sufficiently skilled workforce to deliver Green Deal.

2. Householder preferences:

- Householders did not seem to have a particular preference for a type of partner to deliver the pilot, which could be important for future delivery providers. This was surprising bearing in mind how householders can be very wary of energy suppliers' motives. Householders reported key attributes they valued in delivery partners or future providers as: impartiality, security and energy expertise.

  This carries important implications for which organisations or partnerships may deliver Green Deal.

- Householders mainly chose a longer repayment period. Over 70% of householders opted for the longest repayment period of 25 years, showing that householders wanted to make repayments affordable and were happy to be committed to the repayments over the long term to reduce monthly costs. This demonstrated that though householders initially say they are worried about long term debt, they actually prefer the longer term financial options if it means they payments are affordable monthly and it doesn't impact on their monthly disposable income dramatically.

  This has important implications for the financial package options Green Deal providers may offer householders.

- Householders signed up to a broad spectrum of financial packages ranging in average from £4,194 in £13,217. One pilot (the Stroud/SWEA pilot) demonstrated that householders were willing to make their own financial contribution. Twenty nine householders made a contribution to their package, at an average of £2,638.13, ranging from £17.17 to £10,928.01. This demonstrates that if householders wanted specific measures which were outside or over the packages available some would happily contribute their own funds.

  This informs potential Green Deal providers about how to structure their offers and options.

- On average, householders chose to install two to three measures, with eight measures being the maximum number of installations in any one home. In total, 811 energy efficiency and microgeneration measures were installed within the 311 properties. Double glazing was the most popular measure with 154 householders choosing to install the measure. Solar PV panels were the second most popular measure with 131 householders installing the technology in their homes. External solid wall insulation was the joint-fifth most popular measure, alongside draft proofing, with 72 installations of each being installed in homes.

  This informed the Green Deal in terms of what measures householders would be keen to take-up and therefore, more likely to take up green deal if they were included.

3. Customer assurance

- The quality of service was also an important factor for householders, including the assessment, recommendations and the quality of installation. The need for a standardised approach for calculating and modelling the energy consumption and savings that could be made if measures were installed was apparent. In the pilot, partners were all allowed to apply different methods for carrying out the home energy assessment and modelling the predicted savings for householders, therefore, the savings provided to householders were not comparable across pilots and very different in some cases.

  Green Deal policy will have an accreditation framework, including the use of accredited installers, which means all householders will be protected under this framework.

- The home energy assessment was very effective at guiding the householders' choices in which measures to install. Householders recognised the key benefit of the home energy assessment to be providing authoritative guidance and reassurance on the measures they should install in their home.
  85% of PAYS householders interviewed had an idea of what measures they wanted to install before the assessment; in almost half of the cases the assessment influenced them to change their minds over some of the measures. However, householders stated that they would not pay for it upfront, they expected the cost to be included in the overall service.

This has informed Green Deal and the assessment is integral in the Green Deal process and an element which all householders will have to go through in order to be eligible for Green Deal.

- The need for a coordinated approach by the delivery partner to provide the householder with confidence that the job would be delivered efficiently and effectively was important. Householders cited timely, convenient and minimal numbers of household energy assessments as important factors. Individuals were happy to tolerate short-term disruption to get quick installations rather than installing measures over a longer period.

  This will inform Green Deal providers the need for a coordinated approach to ensure customer satisfaction and uptake.

Conclusions

Although the new Green Deal proposes a different model to that of the PAYS pilot models, the pilot still provided relevant and valuable insights into delivering financial packages to encourage energy saving installations in homes.

This paper has demonstrated, using the PAYS case study, that despite policy landscape and context changes during pilot delivery periods, pilots can still be influential and informative to future policy if the evaluator and/or steering group is flexible enough to ensure that findings are relevant to the new context. There is obviously a balance to be struck in terms of ensuring that the evaluation objectives/questions are being answered in order to understand if the pilot delivered as 'intended' and ensuring that the evaluation remains a 'live' document and develops with the changing circumstances. It is the responsibility of the evaluator and evaluation steering group to find this balance, which successfully occurred in the PAYS pilot.

Otherwise, if evaluation is inflexible then there is always the risk that no lessons will be drawn and the evaluation will be left on the shelf.

References

Energy Saving Trust, 2010. "Pay As You Save Pilot Review Report". The Energy Saving Trust and Department of Energy and Climate Change. http://www.energysavingtrust.org.uk/Publications2/Corporate/Projects/Home-energy-Pay-As-You-Save-pilot-review-report.