



Board Paper

8th December 2016

Paper Title:	Paid Ecosystem Services Defining NRW's role in the development of an integrated approach to Payments for Ecosystem Services (PES).
Paper Reference:	NRW B B 69.16
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Purpose of Paper:	Decision
Recommendation:	<p>To note the developments in this sector, review NRW's approach to it and approve the way forward proposed in this paper – specifically we make the following recommendations for the board to consider and endorse:</p> <ul style="list-style-type: none">• NRW should continue to develop our approach to the four roles outlined in the Assessment.• Continue engagement around PES with staff, to include guidance in part based on this paper, later in 2016/17 and also develop an intranet page providing details of existing schemes.• Review opportunities to develop projects that use NRW's experimental powers to provide regulatory support for a PES scheme.• Develop a delivery plan building on Annex 3 of this paper that outlines the steps to fully align NRW to the roles developed in the present paper.

Impact:	Looking at the <u>long term</u> : This paper views PES as an approach that can augment and integrate investment in ecosystems, improving their ability to provide services in a
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sustainable manner both now and in the future.

Taking an integrated approach: PES addresses present market failures by making connections to new sources of investment. In doing so it integrates service providers and users. Through careful scheme design, this is achieved in an integrated manner, avoiding or minimising impacts on other services.

Involving a diversity of the population: Our approach to PES will make connections with a diverse range of service providers and investors, building understanding and engagement in the process. Through such arrangements, resilience of ecosystems and the services they provide will be enhanced.

Working in a collaborative way: Our approach to PES can only be realised by working in partnership. Our proposed roles in the PES arena are predicated on our strengths as conveners and facilitators of the diverse collaborations that PES entails.

Preventing issues from occurring: PES can address existing market failures and the environmental damage that derive from them. When properly designed, PES schemes can operate without the unintended consequences of conventional markets which externalise environmental and social costs.

Issue

1. NRW recognises Payments for Ecosystem Services (PES) as an innovative approach to delivering sustainable management of natural resources, as described in our Regulatory Principles¹. PES initiatives are of particular value in addressing present market failures². Currently, in part due to the contraction in public sector funding, PES is attracting interest within NRW, Wales and beyond as a means of encouraging investment in the natural environment, despite austerity. To steer and foster this growing sector, we present an integrated definition of PES, a strategic assessment of NRW's role in the PES sector in Wales and a suggested path forward, for which we seek Board's endorsement.

Background

2. In its broadest sense PES are, as the phrase suggests, transactions, usually financial, used to secure the provision of ecosystem services, for the benefit of the purchaser, either directly or for those the purchaser is acting on behalf of. In this sense the purchaser may be the public and / or private / and / or third sector.
3. More usually PES is taken to mean a market-based mechanism wherein private sector payment is provided to land or other natural resource managers in return for a guaranteed flow of ecosystem services (or typically, for management actions likely to enhance their provision) over-and-above what would otherwise be provided in the absence of payment³. For example a water company might be willing to pay landowners within a catchment to rewet peatland to improve the quality and reduce peak flows of river from which drinking water is abstracted, thereby reducing water treatment costs.
4. The ecosystem services under consideration are usually services such as carbon sequestration, flood prevention or defence, amelioration of diffuse pollution, pollination, biodiversity, access and recreation opportunities, but any services provided by a sustainable approach to ecosystem management could be considered.
5. Through our diverse activities, we are already engaged with a very wide range of suppliers and consumers of ecosystem services in Wales. In order to make sense of this diversity and ensure we take an integrated approach in the future, we have

¹https://cyfoethnaturiolcymru.sharepoint.com/teams/Regulatory/ind/strat/_layouts/15/DocIdRedir.aspx?ID=WATE-341-24,WATE-341-24

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/200920/pb13932-pes-bestpractice-20130522.pdf

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/200920/pb13932-pes-bestpractice-20130522.pdf

identified a number of potential roles that NRW could play in the development of PES in Wales.

6. NRW has been working closely alongside the Welsh Government and other key stakeholders to develop and support PES in Wales. Following a number of multi-sectoral workshops⁴, the Welsh Government produced a policy statement for PES in Wales presented here in Annex 2. NRW's roles have been designed to be fully compatible with this policy.
7. Our understanding of this sector has been informed and enhanced through our engagement in a number of practical applications of PES involving alternative funding sources. These range from steering the investment of Corporate Social Responsibility funding from major multinationals (e.g Ford Motor Corporation and the Llynfi Community Woodland) to convening stakeholder investment into cap and trade⁵ mechanisms to curb nutrient pollution of the Milford Haven waterway. An outline of these key examples is provided in Annex 2. These projects are two points on a spectrum that ranges from a relatively simple facilitation approach to a more complex market mechanism application of PES. Both go some way to exploring how we might implement some of the roles outlined in the present paper in specific instances.

Assessment

8. This paper follows the broader multi-sectoral investment definition of PES. The risk for NRW only adopting the narrower private sector definition, particularly given our SMNR remit, is that we fail to recognise the inherent limitations of purely private sector funding and simultaneously miss the potential synergy of combining private sector investment with much of our present grant-in-aid investment in ecosystem services.
9. Private sector PES investment is well suited to address payments for certain more easily commoditised ecosystem services. Other services (for example, biodiversity), while critical to wider ecosystem health and service provision, may struggle to attract

⁴ <http://gov.wales/topics/environmentcountryside/consmanagement/payments-for-ecosystems-projects/?lang=en>

⁵ Cap and trade is a market regulation mechanism whereby the scheme regulator issues or auctions credits permitting the emission of a certain amount of pollutant (beyond which is not permitted) to operators. Operators are free to trade (the 'trade' in 'cap and trade') these credits depending on their business needs, purchasing further credits from other operators if they wish to increase emissions, and selling if they are able to reduce emissions. The market value of credits that may be sold as a result of efficiency or other measures for an operator are an incentive to reduce emissions. This efficiency incentive is further enhanced by the periodic removal of credits from the market by the scheme regulator to lower the overall cap (the 'cap' in 'cap and trade') on emissions, to drive emissions lower. The reduction in the cap ensure that emissions reductions are achieved, while the tradeable element allows this reduction to occur through the operation of individual operator's business decisions, fostering market benefits such as innovation, economies of scale etc and avoiding the pitfalls of a command-control approach.

sufficient private investment and may continue to depend on significant public sector funding⁶. Furthermore, opportunistic development of PES through private sector channels does not explicitly tackle issues of inequality around access to ecosystem services – and may even add to inequality issues by pricing services beyond the affordability of some consumers⁷.

10. As NRW potentially occupies a range of different roles in the wider definition of PES (see Assessment), it is important to set these within that context so we can help deliver a PES approach through integrating investment from all sources, while avoiding potential unintended consequences of a narrower definition.

11. NRW has identified four potential roles to play in the development of PES in Wales:

- As **ecosystem service providers** through, for example, the management of the Welsh Government estate and the NNR network and through the public works we undertake in terms of flood risk management.
- As **purchasers of ecosystem services** on behalf of the tax payer, through our grant funding, procurement and land managers agreements
- As **regulators**, firstly in our role delivering the underpinning regulatory floor that ensures payments achieve true additionality above legal compliance⁸, and secondly potentially as regulators of the specific terms of specific schemes that we may instigate or engage with.
- As **facilitators**, through our engagement with a wide range of stakeholders some of whom may be providers, others purchasers.

12. The rationale behind these roles and examples of our present and possible future activity around them are considered in more detail within Annex 3.

13. It is important to recognise that a regulator who may also be a participant in the regulated market is under a special obligation to operate with transparency and accountability, in order to prevent influence of conflict of interest. As NRW has developed, we have become more familiar with these issues: for example, our management of WG's forestry estate and our role as forestry regulator. Our approach in such instances is clearly guided by our Regulatory Principles which when correctly implemented, deliver the prerequisite transparency and accountability. Through the implementation of our Regulatory Principles, we are well placed to effectively deal with the issue of conflicts of interest and therefore could actively take part in the

⁶[http://www.academia.edu/3290913/ Reading for difference with Payments for Ecosystem Services in Wales](http://www.academia.edu/3290913/Reading_for_difference_with_Payments_for_Ecosystem_Services_in_Wales)

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⁸ Additionality are management actions beyond that required by regulation.

development of PES in multiple roles. Are there particular clauses that NRW needs to take account of and should these be highlighted here, after all we would say this wouldn't we!

14. NRW has previously had concerns over the potential resource commitment of providing a regulatory function for PES schemes (beyond any statutory regulatory floor which we already provide). Our developing work around charging has informed this position further and we are now confident that the resource implications of providing additional regulatory functions to PES could be covered in full by charging a scheme for any additional regulatory services.
15. In conclusion, by adopting the roles in the PES arena, outlined above, NRW will have access to all the tools to play a leading role in steering and nurturing the development of PES in Wales. This will ensure that PES projects, while capturing valuable new sources of funding, are well aligned to the delivery of our environmental objectives. This model of leveraging outcomes is very much in line with thinking on the future trajectory of NRW. Practically, projects such as those outlined in Annex 2 are helping us explore and develop these roles further, be they simple facilitation or more complex design and convening of schemes.

Recommendation(s)

16. We make the following recommendations for the Board to consider and endorse:
 - NRW should continue to develop our approach to PES and the four roles outlined in the Assessment.
 - Continue engagement around PES with staff, to include guidance in part based on this paper, later in 2016/17 and also develop an intranet page providing details of existing schemes.
 - Review opportunities to develop projects that use NRW's experimental powers to provide regulatory support for a PES scheme.
 - Develop a delivery plan building on Annex 3 of this paper that outlines the steps to fully align NRW to the roles developed in the present paper.

Key Risks

17. There is a risk that if we fail to embrace the considerable opportunity for attracting additional investment that PES represents, we will struggle to maintain and enhance our delivery of environmental outcomes in a climate of reducing grant in aid.
18. Given the innovative nature of this work programme, there is a high likelihood that some resources will be expended on developing projects that ultimately remain on the

drawing board through operational issues, complexity and/or challenge from stakeholders. This is an almost inevitable consequence of innovation. However this investment is unlikely to be completely lost and should not be viewed as such, as elements of the learning and techniques developed are likely to be transferable to other successful projects.

19. Developing PES requires an acceptable minimum level of regulatory compliance on which the additional value bought by the scheme can be built, in order to prevent “paying the polluter”. Consequently, as we enter an era of potential regulatory change, PES heightens the centrality of fair and proportionate regulation and enforcement, in line with our regulatory principles.

20. There is a risk that our expectations of PES exceed its true potential. What external PES investment can realistically deliver must be borne in mind. PES is not simply a surrogate for grant in aid, for reasons outlined above.

Financial Implications

21. For ecosystem services we provide and deliver (either through management of WG’s estate or through our projects and programmes), by establishing new markets for these services, PES represents a potential enterprise opportunity to bring new income streams into NRW, subject to legal clarification.

22. For services we commission from others, a PES focus could deliver better environmental value for our investment by explicitly focussing on environmental outcomes of all of our commissioning and procurement transactions. This would potentially require a light touch review of our present procedures in these respects.

23. As regulators, PES places little additional burden on us. In the first instance PES highlights the importance of a coherent and comprehensive regulatory landscape in underpinning additionality, very much in line with our Regulatory Principles. Our regulatory improvement and innovation programme is already aligned to this objective. Secondly, where further regulatory input is required over and above the regulatory floor for a particular scheme, **we will aim to deliver full cost recovery, chargeable to the scheme** through contract, subject to legal consultation.

24. As facilitators and conveners of PES, much can be delivered in synergy with our diverse network of stakeholder engagement activities, leveraging our investment of staff time considerably.

Communications

25. As part of designing and delivering the work programme going forward, we will develop a comprehensive communications programme that faces both internal and external stakeholders.

Equality impact assessment (EqIA)

26. No assessment has been undertaken as yet, but as we develop the work programme to deliver these roles, we will undertake a full equality impact assessment.

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1. Welsh Government National Natural Resource Policy Statement on PES
2. Practical examples of NRW's present PES work: Llynfi Community Woodland & Cleddau Nutrient Trading Proposal.
3. Further Assessment of NRW's roles in PES