PART 1

To: Scottish Consultation Authorities: SEA.gateway@scotland.gsi.gov.uk

PART 2

An SEA Screening Report is attached for the plan, programme or strategy (PPS) entitled:

Scotland River Basin Management Plan – second cycle

The Responsible Authority is:

Scottish Environment Protection Agency

COMPLETE PART 3 OR 4 OR 5

PART 3

Screening is required by the Environmental Assessment (Scotland) Act 2005. Our view is that:

☐ **an SEA is required** because the PPS falls under the scope of Section 5(3) of the Act and is likely to have significant environmental effects ***or***

☐ **an SEA is required** because the PPS falls under the scope of Section 5(4) of the Act and is likely to have significant environmental effects ***or***

☒ **an SEA is not required** because the PPS is unlikely to have significant environmental effects

PART 4

☐ The PPS does not require an SEA under the Act. However, we wish to carry out an SEA on a voluntary basis. We accept that, because this SEA is voluntary, the statutory 28 day timescale for views from the Consultation Authorities cannot be guaranteed.

PART 5

☐ None of the above apply. We have prepared this screening report because:

……
……
……

PART 6	
Contact name	Susan Dean
Job Title	Principal Policy Officer
Contact address	Graessar House Fodderty Way Dingwall Business Park Dingwall IV15 9XB
Contact tel. no	01349 860442
Contact email	susan.dean@sepa.org.uk

PART 7	
Date	17 December 2013

Key Facts	
Responsible Authority	Scottish Environment Protection Agency
Title of PPS	Scotland River Basin Management Plan (Scotland RBMP) – second cycle
Subject	Water management
Purpose of the PPS / Requirement for the Plan	Preparation of the Scotland RBMP is a requirement of the Water Environment and Water Services (Scotland) Act 2003 which transposes the EC Water Framework Directive into domestic legislation. The first Scotland RBMP was published in 2009 and set the framework for protecting and enhancing the water environment from 2009 to 2015. Some commitments made in the Plan extended to 2021 and / or 2027. The Scotland RBMP must be reviewed and updated every six years i.e. in 2015, 2021 and 2027. This current review will be the first of these required updates.
Area covered	The Scotland RBMP covers an area of some 113,920km^2 from Shetland in the north to Glasgow, Ayr and Edinburgh in the south. Around 4.8 million people live in the district, most in the central belt between Glasgow and Edinburgh. The landscape varies from the mountainous Highlands and the extensive coastline to the urban and industrial areas around Glasgow and Edinburgh.
Summary of nature / content of PPS	The Scotland RBMP contains a Programme of Measures to meet the overarching objectives which it must achieve. The purpose of this revision is to determine if the objectives have been met and, if necessary revise the objectives and associated Programme of Measures.
Plan objectives	The overall objective of the Water Framework Directive is to bring about the effective co-ordination of water environment policy and regulation across Europe. To achieve this, effective RBMPs are required that identify environmental objectives which represent an appropriate balance between environmental, social and economic interests. Overarching objectives of the RBMPs are to: • prevent deterioration and enhance the condition (status) of aquatic ecosystems, including wetlands and groundwater; • promote sustainable water use;

	• reduce pollution; • contribute to the mitigation of floods and droughts. The objectives contained in the Scotland RBMP and set out in Annex 1 of this report represent the best estimate of what is expected to be achieved by 2015, 2021 and 2027. They will act as the route map for prioritising work to improve the water environment. At the heart of the RBMP is the programme of measures to be undertaken to meet the objectives. These measures are the actions that will be taken to maintain or improve the quality of water bodies to the level required by the WFD. The purpose of this revision is to determine if the objectives have been met, and if necessary revise the Programme of Measures. The measures which will be considered in the review are set out in Annex 2. All except two of the measures proposed to be included in the revision are already included in the Scotland RBMP and were assessed in its associated SEA as detailed in the Strategic Environmental Assessment of the Draft Scotland River Basin Management Plan - Environmental Report (ER 2009) (see Annex 3).

SEPA's views on the likelihood of significant environmental effects arising form the proposed revision of the Scotland RBMP are set out in Table 1 below.

Table 1 – Likely significance of effects on the environment

Criteria for determining the likely significance of effects on the environment	**Likely to have significant environmental effects** **YES / NO**	**Summary of significant environmental effects (negative and positive)**
1(a) the degree to which the PPS sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources	NO	The framework set by the Scotland RBMP is designed to facilitate an improvement to the water environment. The ER 2009 described the potential environmental effects of the Scotland RBMP as largely positive. The proposed revision will not alter the framework set by the Scotland RBMP.

1(b) the degree to which the PPS influences other PPS including those in a hierarchy	NO	The Scotland RBMP may lead to projects being progressed on the ground through other associated PPS, or PPS which are influenced by the RBMP. The proposed revision will not alter the influence of the Scotland RBMP in this respect.
1(c) the relevance of the PPS for the integration of environmental considerations in particular with a view to promoting sustainable development	NO	The Scotland RBMP is intended to ensure an effective balance between: • the protection of the water environment; • sustainable economic development; and • the interests of those who depend upon the water environment for their quality of life. As such sustainable development considerations are embedded in the plan. This aspect of the plan will not be changed by the review.
1(d) environmental problems relevant to the PPS	NO	The Scotland RBMP targets areas and issues where there are significant environmental problems with regard to the water environment. The review of the plan will further develop the aspirational measures contained in the Scotland RBMP and address environmental issues on the ground. As such the proposed revision will not significantly alter this aspect of the plan.
1(e) the relevance of the PPS for the implementation of Community legislation on the environment (for example, PPS linked to waste management or water protection)	NO	The Scotland RBMP is relevant in terms of implementation the Water Framework Directive. The proposed revision will not alter the original purpose / priorities of the plan in this respect.
2 (a) the probability, duration, frequency and reversibility of the effects	NO	The proposed revision of the Scotland RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (b) the cumulative nature of the effects	NO	The proposed revision of the Scotland RBMP will be a minor modification and

		will not significantly change the potential environmental effects set out in the ER 2009.
2 (c) transboundary nature of the effects (i.e. environmental effects on other EU Member States)	NO	The proposed revision of the Scotland RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (d) the risks to human health or the environment (for example, due to accidents)	NO	The proposed revision of the Scotland RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (e) the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)	NO	The proposed revision of the Scotland RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (f) the value and vulnerability of the area likely to be affected due to- (i) special natural characteristics or cultural heritage; (ii) exceeded environmental quality standards or limit values; or (iii) intensive land-use.	NO	The proposed revision of the Scotland RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.
2 (g) the effects on areas or landscapes which have a recognised national, Community or international protection status	NO	The proposed revision of the Scotland RBMP will be a minor modification and will not significantly change the potential environmental effects set out in the ER 2009.

TABLE 2 – SUMMARY OF ENVIRONMENTAL EFFECTS

SEPA is of the opinion that the proposed revision of the Scotland RBMP will not generate any new or additional significant environmental effects. In order to reach this conclusion SEPA has undertaken a screening exercise to assess whether the measures proposed to be considered in the revision will result in significant environmental effects beyond those assessed and detailed in the ER 2009. The results of this exercise are detailed in Annex 4.

In summary SEPA concludes from the screening exercise that:

1. The proposed revision will not change the underpinning Water Framework Directive objectives of the existing Scotland RBMP to prevent deterioration and enhance the condition (status). The significant environmental effects which may potentially occur as a result of the Scotland RBMP have already been assessed and detailed in the ER

2009.

2. All but two of the measures it is proposed to consider in the revision were included in the Scotland RBMP. The principle of the measures, except the proposed two new measures has therefore already been subjected to SEA and the results set out in the ER 2009. The two new measures which will be considered relate to new research and policy improvements; any significant effects from this type of activity will be secondary and is difficult to predict at a strategic level (as described in Appendix F paragraph 1.1.1 of ER 2009). It is not expected that the proposed revision will lead to significant environmental effects at a strategic level which have not already been identified and explored in the previous assessment.
3. The proposed revision will further develop aspirational measures contained in the original RBMP, largely aimed at influencing the direction of policy, research and engagement activity. The nature and location of the projects that would be taken forward by these measures is not fully or directly prescribed by the RBMP. The environmental effects resulting from such activity will be secondary and as described in the ER 2009 such effects are difficult to predict as they are dependent on others to carry out actions and are therefore considered to be uncertain at a strategic level. Therefore any SEA undertaken on the proposed revision would be unable to reach any meaningful conclusion. Assessment of the environmental effects of such activity is therefore best directed to project level assessment.
4. Mitigation measures were established in the ER 2009 which largely relied on delivery through existing regulatory regimes. As such mitigation of potential adverse effects is already embedded in the RBMP. No additional significant adverse effects are expected as a result of the revision, however should adverse effects emerge then it is reasonable to conclude that existing mechanisms within the RBMP and existing regulatory mechanisms will ensure that appropriate mitigation is implemented in a timely manner.

SEPA is of the view that the revision to the Scotland RBMP does not require a Strategic Environmental Assessment. The views of the Consultation Authorities on likely significant effects are now sought within 28 days of submission of this screening opinion under Section 9 (3) of the Environmental Assessment (Scotland) Act 2005.

Annex 1 – Scotland RBMP Objectives

Overall objectives for improving the status of water bodies in the Scotland RBD are summarised in Table 1 below. The objectives represent the best estimate of what is expected to be achieved by 2015, 2021 and 2027. They will act as the route map for prioritising work to improve the water environment. The Scotland RBMP contains a Programme of Measures to meet these objectives.

Table 1: Overall objectives for improving the status of water bodies in the Scotland River Basin District

	Proportion of water bodies in a good or better condition (%)			
	2008	2015	2021	2027
All water bodies	65	71	77	98
Rivers	56	63	71	97
Lochs	66	71	77	98
Estuaries	85	85	85	98
Coastal waters	94	97	98	99
Groundwater	76	85	88	94

As part of each six yearly update of the plan the objectives are reviewed to assess what can be achieved earlier than anticipated; or where updated classification (based on more information or improved standards) now shows that as things are worse than expected the improvement may take longer than planned or require additional measures. Although some additional measures may be introduced, the core of the plan will not change. As such the impacts of the changes to the plan would represent no more than a minor modification of those assessed during the first Strategic Environmental Assessment.

Annex 2 - Measures to be considered in the review of the Scotland RBMP

Measure	Explanation	Link to existing measures / delivery mechanism	In 2009 Plan and / or SEA?
Rural diffuse pollution			
Resources	Increasing the number of people we have working with farmers to help them identify what they can do, and where, to reduce pollution risks. Experience to date indicates that the provision of on-the-ground advice is the most important factor in determining whether the right actions are taken in the right places.	Reduce diffuse source inputs: campaign / awareness raising and promotion of best practice	Yes
Financial support	Re-prioritising how we target the funding support we provide to farmers so that it better helps them take appropriate actions over and above basic good environmental practice. For example, to control pollution from nutrients in some water bodies, options such as creating woodland buffers or wetlands to help intercept pollutants may be needed. Building on and extending our partnership approach to working with land managers to ensure we best utilise the knowledge and resources of public funded bodies and ensure coordinated and integrated advice and support Another example is the Sustainable Land Management Incentive Scheme introduced by Scottish Water in 2013. This provides funding to land managers to protect and improve water quality in some catchments from which Scottish Water sources our drinking water.	Reduce diffuse source inputs: Economic incentives	Yes
Reduce inputs	Exploring options to reduce phosphorus use with the UK Government, Environment Agency, and relevant stakeholders (e.g. to reduce phosphorus additives in livestock feed	No equivalent delivery mechanism	No
Training and education	Embedding understanding of how to mitigate diffuse pollution risk in education and training courses for land managers, such as those run by the Scottish Agricultural College. This will	Reduce diffuse source inputs: campaign / awareness raising and promotion of best practice	Yes

	foster good practice for the next generation of farmers and those undertaking further training and education.		
	Identifying opportunities where Flood Risk Management Strategies could also help to control diffuse pollution management and impacts on habitats while helping to provide natural flood management, increase amenity value and improve wildlife corridors.	Not a measure – an opportunity spotting exercise	N/A
Chemicals of national concern			
Reduce inputs	Improve mechanisms to prevent the entry of these substances into the sewer network and water environment, through, for example the more widespread implementation of sustainable urban drainage systems (SUDS).	Retrofit / improve existing SUDS / CAR 2005 GBR	Yes
	Consider control of imported products containing these substances or gain international agreement on ceasing use in products where control or restrictions are not in place	No equivalent measure	No
	Work with roads authorities to look at targeted maintenance sweeping of roads and emptying of gully pots on roads with high uses	Not a measure – an opportunity spotting exercise	N/A
Water pollution caused by land contamination			
Framework	Develop our existing policy framework for dealing with contaminated land to give a greater weighting to identifying and dealing with those sites that pose the greatest environmental risk. We still expect that the majority of sites will be tackled by local authorities with advice from SEPA as necessary. However, we think the framework should better focus SEPA's efforts to secure improvements on sites posing the greatest pollution risks.	Not a measure - this is a proposal to develop internal framework	N/A
	Re-prioritising funding to ensure that sites we prioritise for action can be addressed in the absence of other means of securing the necessary improvements (e.g. through site re-development).	Not a measure – an opportunity spotting exercise	N/A
	Improving mechanisms for exchange of data and information between SEPA and local authorities to enable	Not a measure – an opportunity spotting	N/A

	identification or flagging of sites posing the greatest risk to the water environment	exercise	
Sewage disposal			
	Encouraging development use of low energy wastewater treatment systems, as well as varying treatment according to flow and / or season.	Not a measure - this is a research aim	N/A
	Working with the UK Government and Scottish Water to review the potential to reduce the phosphorus content of dishwasher detergents, food additives and tap water dosing.	Reduce at source / legislation (considered as part of continued improvement)	Yes
	Working with Scottish Water to develop techniques for recovering resources such as phosphorus from the sewage at treatment works in a form that can then be re-used.	Not a measure - this is a research aim	N/A
Physical condition			
	Expanding the amount of staff involved in engagement work aimed at identifying opportunities for, and securing partnership initiatives to deliver, improvements to the physical condition of water bodies.	Improve modified habitat / campaign, awareness raising and promotion of best practice	Yes
	Working with those responsible for the management of built structures in the water environment (such as road and rail crossings, etc) to embed environmental improvements into the maintenance programme for those structures.	Not a measure – an opportunity spotting exercise	Yes
	Increasing the amount of support and funding available for making improvements.	Improved modified habitat / economic incentive	Yes
	Taking forward a more integrated, partnership approach between responsible authorities and other public bodies that links our goals for the water environment with wider goals for biodiversity, woodland creation, fisheries, flood risk management, urban regeneration and green-space and green network provision in and around our towns and cities.	Not a measure – an opportunity spotting exercise	N/A

Annex 3 – Summary of previous SEA

The ER 2009 details the SEA which was undertaken as part of the preparation of the Scotland RBMP. A brief summary of the assessment process undertaken and its findings is set out below.

The Scotland RBMP contains three categories of measures:

- national measures that are applied across Scotland;
- regional measures that occur across part of the river basin district; and
- local measures that are developed in response to a specific issue usually targeted at a particular water body or part of a water body.

These measures form the building blocks of the Scotland RBMP and it is these measures which formed the basis of the SEA. Because SEA is concerned with indentifying significant environment effects, the SEA concentrated on assessing the impacts of national measures. The SEA included a screening exercise for the list of regional measures, but none were deemed to have significant effects at the river basin district scale and hence were not included in the full assessment.

This approach to the SEA ensured that it was meaningful and focused on the significant issues at the strategic level commensurate with that of the Scotland RBMP.

The SEA assessed the potential significant effects which could result from three sets of measures:

1. Reference / Baseline measures – all existing measures, planned changes and in-the-pipe changes which represent the future state of the environment without the RBMP.
2. Draft RBMP measures – proposed new measures which form the basis of the RBMP for the purposes of implementing the WFD.
3. Continued Improvement measures – additional actions which were viewed as practical possibilities that could make progress to Continued Improvement in meeting WFD objectives over the next three river basin planning cycles to 2027.

The cumulative effects of these three sets of measures was also assessed, firstly for the interaction of the draft RBMP and the Reference / Baseline measures, and secondly for the interaction of the Continued Improvement measures with the measures in both the draft RBMP and the Reference / Baseline case.

The assessment found that:

- The Draft RBMP may potentially result in a large number of positive and significant environmental effects;
- The significant environmental effects due to the measures in the Reference/Baseline case, the Draft RBMP and Continued Improvement are broadly similar;
- All the options produce significant positive effects for biodiversity, flora & fauna and for water;
- Because the measures in the Draft RBMP and Continued Improvement options apply in combination with Reference/Baseline measures, the benefits

are likely to be greater for the Draft RBMP than for the Reference/Baseline and would be enhanced further by the measures in Continued Improvement.

The main SEA topics under which the draft RBMP options were assessed as having potential significant adverse impact were:

- Biodiversity, flora & fauna – through transfer of impacts from one location to another;
- Population and human health – through possible changes in water supply output;
- Water - through transfer of impacts from one location to another;
- Climate factors – through increased energy consumption and greenhouse gas emissions;
- Material assets – through increased waste production.

The ER proposed mitigation measures to address these negative effects which were updated in the SEA Statement; these are set out in the Table below.

Potential adverse effect	**Mitigation recommended in ER**	**How this has / will be taken into account (SEA Statement)**
Increased waste	Increases in waste production were identified as potential effects from a number of measures. The RBMP should ensure that consideration of waste generation, and its disposal, is given due emphasis during planning. It should also ensure that best practice associated with measures includes the application of the waste hierarchy whereby preferred options of reuse and recycling of materials are utilised over disposal to landfill.	The potential negative effects attributable to increased waste will be effectively managed through best practice and through existing legislative and regulatory regimes which comprehensively cover waste management. These include sludge disposal, incineration, waste management licensing and landfill regulations.
Increased energy use	Increases in energy use and associated emissions were identified from measures associated with additional treatment, storage and / or pumping of water prior to discharge. There is little that the plan can do directly to reduce these impacts. However, promotion of renewable sources of energy, and of energy efficient infrastructure should be encouraged. Measures should also be implemented with consideration of national strategies on climate change.	Mitigation of these effects will largely come through consideration of individual applications of measures. SEPA has been working with Scottish Water to consider climate impacts. A joint initiative has been established to ensure that carbon is accounted for (financially or quantitatively) in decision making as part of a 'net environmental benefit' assessment in order to promote sustainable choices in protecting the water environment. In order to achieve this SEPA and Scottish Water will seek to develop a common approach to: • principles of carbon

		accounting; • risk and environmental benefit; • ongoing policy work e.g. - seasonal consents; - consenting by reference to in river - quality standards; - carbon impact in setting new standards. Also, as a result of this finding, a "climate resilience check" of all RBMP measures has been undertaken by SEPA. This has evaluated the resilience of the measures to predicted climate change in Scotland.
Deployable Output	A number of measures could have a negative effect on the deployable output from impoundments (such as for hydro electric power generation	Mitigation of such effects is likely to be particular to individual measures and their implementation. SEPA will consider these issues as part of our regulatory duties.
Relocation of environmental pressures	There is potential for environmental effects to be experienced by water bodies as an indirect consequence of a measure on another water body (e.g. where an effluent discharge is relocated or abstraction point moved).	While the risk of this is possible, it should be addressed by the fact that: • evaluation will take place of the effects of measures at project level and as part of consenting processes (e.g. CAR); • all water bodies will still require to meet the standards set within the RBMP and should not be allowed to deteriorate.

The SEA process also considered opportunities for enhancement of the Plan. Given the environmental nature of the Plan there was found to be limited scope for this. The key mechanism in this respect was to ensure that due consideration be given to effects on population & human health, cultural heritage and material assets during the implementation of measures.

All but two of the measures proposed to be considered in the revision were included in this assessment.

Annex 4 – Assessment of previously predicted significant effects and forecast of any new significant effects

Environmental issues identified in ER 2009 (Section 3)	Relevant to the proposed revision? Yes / No	Any new issues? Yes / No	Significant positive effects identified in ER 2009 (Section 5) for: 1. Reference / baseline measures 2. Draft RBMP measures 3. Continued Improvement measures	Significant adverse effects of measures identified ER 2009 (Section 5)	Any changes forecast to effects due to revision? Yes / No
Biodiversity • Water quality, eutrophication, acidification and N and P levels in waterbodies; • Effects on habitats from flooding and droughts; • Habitat and biodiversity loss due to morphological changes; • Non-native species.	Yes	No	Measures to address diffuse pollution and point source pollution will improve water quality, reduce eutrophication and therefore have benefits for aquatic ecosystems. Water efficiency measures could potentially result in more water being available for aquatic ecosystems and for greater dilution of pollutants. Controlling the rate and timing of abstraction will reduce biological stress (especially during low flow periods) and also provides the additional benefit of a more “natural” hydrological regime. Measures to improve morphology will lead to direct improvements for aquatic and riparian habitats. Measures to deal with non-native invasive species will likely lead to direct biodiversity benefits in the areas affected.	Transfer of impacts from one location to another.	No
Population • Recreational use of water; • Tourism and National Parks; • Commercial activities;	Yes	No	Measures to reduce diffuse and point source pollution will help to protect human health through reducing pollutant loads to protected areas such as drinking waters and bathing waters. Water efficiency measures could potentially result in more water being available for the dilution of	Possible changes in water supply output. Transfer of impacts from one location to another.	No

• Bathing waters; • Shellfish waters; • Drinking water supply; • Fisheries.			pollutants and hence provide additional protection for protected areas. Some measures may improve access to waters in the RBD, particularly where measures to improve water quality will enable greater access for bathing or other recreational pursuits. Water improvements may increase amenity value of water bodies in the RBD.		
Water • Diffuse pollution; • Point source pollution; • Abstraction and flow regulation; • Alterations to morphology; • Non-native invasive species; • Sustainable water use.	Yes	No	Similar effects to those noted above for biodiversity, fauna and flora. All of the measures in the RBMP are designed to address a pressure that is adversely affecting a water body. Accordingly, all measures are designed to produce positive effects on water quality in the water bodies to which they apply.	Transfer of impacts from one location to another.	No
Air • No significant effects likely	No	No			No
Climate • Climate change mitigation / adaptation; • Flooding; • Droughts; • Carbon use.	Yes	No	Many measures will result in positive effects, particularly in relation to sustainable flood management, mitigation of floods and droughts, and to climate change adaptation. Greater efficiency in water use may reduce the volume of raw water that has to be treated, which may result in some energy and greenhouse gas emission savings.	Increased energy consumption and greenhouse gas emissions. Removal of engineering structures may increase flood risk.	No

			Measures relating to abstraction and flow regulation in particular may have positive benefits for the management of floods and droughts.		
Soils • Forestry or other types of plant cover; • Land vulnerable to erosion; • NVZs; • Other land use practices.	Yes	No	Improvements in water quality caused by measures that tackle diffuse and point source pollution may result in improved soil quality as fewer pollutants will be deposited on land. Measures relating to abstraction and flow regulation may also lead to benefits for soils by reducing erosion by floods or soil loss through drought. Measures to improve morphological conditions of channel banks, shorelines, riparian zones and wetland habitats will help to improve infiltration rates, reduce runoff and therefore contribute to reducing erosion.	Changes in sediment maintenance regime may impact on soils if disposal of contaminated sediment is not according to best practice.	No
Cultural Heritage • Nationally designated sites close to water bodies; • Marine archaeology.	Yes	No	The majority of measures are not likely to have significant effects on cultural heritage.	Removal of barriers / engineering structures may result in loss of historic features / recreation opportunities.	No
Landscape • Areas of designated landscape quality (e.g. NSAs); • Sites listed in the inventory of gardens and designed landscapes.	Yes	No	The majority of measures are not likely to have significant effects on landscape, although measures to improve downgraded waterbodies (especially where they have been modified) will have positive landscape effects at the local level.	Inappropriate design of works may affect landscape aesthetics.	No
Material Assets	Yes	No	Measures aimed at increasing water-use efficiency (e.g. leakage reduction) could result in	Increased waste	No

• The protection of water related assets including flood defences, ports and harbours; • WWTWs; • Sustainable use of water.			better use of water and as a result better use of other resources e.g. energy. As a result of the above, it is possible that this could delay the need for additional new infrastructure.	production. Ecological measures may reduce deployable output of reservoirs / renewable energy delivery.	