Appendix 4 – Detailed SEA Assessment Table – All Technologies

Environmental Report

Renewable & Low Carbon Energy Supplementary Guidance

July 2017

<u>Wind</u>

				Wind
SEA Topic	SEA Objective	Score	Time-scale	Evaluation
Human Health	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to con
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to con
Pop and	SEA 10 – Protect and enhance green infrastructure and networks	+/-	S/M	There is potential for negative effects on green infrastructure and networks through the construction of wind energy will set out detailed criteria to mitigate against the loss of existing green infrastructure and networks. Development p enhance existing, and establish new, green infrastructure and networks.
	SEA 12 – Protect and enhance air quality	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to con resultant improvements to air quality.
	SEA 1 – Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M	There is potential for negative effects on valuable soil resources which support biodiversity and flora/fauna from the The SG will set out criteria to mitigate impacts, and identify opportunities for enhancement such as peatland restorat Class 1 and 2 peatlands, as well as prime agricultural land as part of the Strategic Land Use Capacity mapping.
e	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-	S/M	There is potential for negative effects on existing land uses and land cover which provide habitat for biodiversity, in p criteria to mitigate impacts. The Spatial Framework specifically protects internationally and nationally designated site and National Nature Reserves.
flora and faur	SEA 4 - Promote the important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value.	+/-	S/M	There is potential for the loss and/or removal of forestry and woodland cover to make way for turbines and associate negative impacts on associated biodiversity, flora and fauna. The SG will set out criteria to mitigate impacts, and whe through additional planting.
odiversity	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M	There is potential for direct and indirect negative effects on a range of habitats and species, in particular protected sit criteria to mitigate direct and indirect impacts, and where applicable, opportunities for enhancement. The Spatial Fra nationally designated sites including Natura 2000 and Ramsar sites, SSSIs and National Nature Reserves.
ä	SEA 10 - Protect and enhance green infrastructure and networks	+/-	S/M	There is potential for negative effects on green infrastructure and networks through the construction of wind turbine out detailed criteria to mitigate against the loss of existing green infrastructure and networks. Development proposal existing, and establish new, green infrastructure and networks.
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M	There is potential for direct and indirect negative effects on designated sites from the construction of turbines and as require mitigation of direct and indirect impacts, and where applicable, opportunities for restoration. The Spatial Franchistica distribution of direct and indirect and Ramsar sites, SSSIs and National Nature Reserves.
ji ji	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M	There is potential for loss of, and negative impacts, to carbon rich soils and prime agricultural land from the construct The SG will set out criteria to mitigate impacts and identify opportunities for enhancement such as peatland restorati Class 1 and 2 peatlands, as well as prime agricultural land as part of the Strategic Land Use Capacity mapping.
й	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M	There is potential for direct and indirect negative effects on soil-based habitats and species from the construction of will set out criteria to mitigate direct and indirect impacts.
	SEA 3 – Promote the sustainable management of the water environment	+/-	S/M/L	In the short term, during construction, there could potentially be negative effects on the water environment i.e. from is potential for medium and longer term impacts on the water environment if drainage issues, etc, are not addressed indirect impacts through guidance on construction, surface drainage, etc.
Water	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	In the short term, during construction, there can potentially be negative effects on the water environment and associ medium and longer term impacts on the water environment if drainage issues, etc, are not addressed. The SG will set impacts, including temporary impacts during construction and decommissioning.
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	In the short term, during construction, there can potentially be negative effects on the water environment including of and longer term impacts on the water environment if drainage issues, etc, are not addressed. The SG will set out crite including temporary impacts during construction and decommissioning. The Spatial Framework specifically protects of environment including Ramsar and Natura 2000 sites, SSSIs, and NNRs.

ntribute to renewable energy generation.

ntribute to renewable energy generation.

proposals and associated infrastructure. The SG proposals also offer opportunities to significantly

ntribute to renewable energy generation and

siting of turbines and associated infrastructure. tion. The Spatial Framework specifically protects

particular protected sites. The SG will set out es including Natura 2000 and Ramsar sites, SSSIs

ed infrastructure, which is likely to result in ere applicable, opportunities for enhancement

tes and protected species. The SG will set out mework specifically protects internationally and

es and associated infrastructure. The SG will set als also offer opportunities to significantly enhance

ssociated infrastructure. The SG will identify and mework specifically protects internationally and

tion of turbines and associated infrastructure. ion. The Spatial Framework specifically protects

turbines and associated infrastructure. The SG

construction and decommissioning waste. There . The SG will set out criteria to mitigate direct and

iated habitats and species. There is potential for tout criteria to mitigate direct and indirect

designated sites. There is potential for medium eria to mitigate direct and indirect impacts, designated sites associated with the water

				Wind
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There are potential for negative effects on carbon rich soils (and other valuable soil resources) from the construction will set out criteria to mitigate impacts and identify opportunities for enhancement such as peatland restoration. The and 2 peatlands and will direct development to areas where impacts on these resources will be minimised.
	SEA 3 - Promote the sustainable management of the water environment	+/-	S/M/L	There is potential for negative effects on the water environment, both during construction and from the developmer managed. The SG will set out criteria to mitigate any short, medium and long-term impacts on the water environmen enhancement.
actors	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M	There is potential for the loss and/or removal of forestry and woodland cover to make way for turbine development associated negative impacts from forestry and woodland removal in terms of climatic conditions where there is no conformation for compensatory and enhanced planting, where applicable, to offset proposals for forestry/woodland removal.
Climatic F	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to cor associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to cor associated positive climatic benefits.
	SEA 12 – Protect and enhance air quality	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to cor resultant improvements to air quality.
Material Assets	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M	There may be potential for the loss of economic benefits associated with agricultural production as a result of direct criteria to mitigate against impacts as well as identify opportunities for enhancement such as peatland restoration.
	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-	S/M	There is potential for loss of and/or negative effects on land uses and land cover(s) which contribute to society from a infrastructure. As part of the Strategic Land Use Capacity mapping, wind energy developments – at a strategic level – resources will be minimised.
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M	There may be issues with the management and disposal of timber and forestry waste. Wind energy proposals may of recreational opportunities within woodland and forested settings.
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to con
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Onshore wind energy has significant potential to reduce dependency on fossil fuels and increase PKC potential to con associated positive climatic benefits.
	SEA 10 – Protect and enhance, where appropriate, the historic and cultural environment	+/-	S/M	There is the potential for direct and indirect effects on historic and cultural environment, including the setting of hist criteria to mitigate impacts.
Cultural Heritage	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-	S/M/L	There is the potential for direct and indirect negative effects from the siting of wind turbines and associated infrastru impacts, including guidance on design and siting of proposals. The Spatial Framework specifically protects National Pa Land Use Capacity mapping identifying areas where impacts on other landscape considerations should be minimised.

of turbines and associated infrastructure. The SG e Spatial Framework specifically protects Class 1

nt itself if not appropriately designed and/or nt, and where applicable, opportunities for

and associated infrastructure. There is likely to be compensatory planting. There is the opportunity

ntribute to renewable energy generation, with

ntribute to renewable energy generation, with

ntribute to renewable energy generation and

loss of prime agricultural land. The SG will set out

the construction of wind turbines and associated - will be targeted to areas where impacts on these

ffer benefits through developing and enhancing

ntribute to renewable energy generation.

ntribute to renewable energy generation, with

toric and cultural features. The SG will set out

ucture. The SG will set out criteria to mitigate Parks, NSAs and Wild Land, as well as the Strategic

				Wind
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	There is the potential for direct and indirect negative effects on historic and cultural environment, including the settir set out criteria to mitigate impacts.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	There is the potential for direct and indirect negative effects on the integrity of designated sites. The SG will set out cr framework specifically protects sites identified in the Inventory of Gardens and Designed Landscapes and the Invento
Landscape	SEA 2 – Avoid adverse impacts on existing land use / cover	+/-	S/M/L	There is the potential for direct and indirect negative effects from the construction of wind turbines and associated in National Scenic Areas and areas of Wild Land. The SG will set out criteria to mitigate impacts, including guidance on d Framework specifically protects National Parks, NSAs and Wild Land, as well as the Strategic Land Use Capacity mappi considerations should be minimised.
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M/L	There is potential for the loss and/or removal of forestry and woodland cover to make way for wind turbines and asso compensatory planting, there is likely to be associated negative effects from forestry and woodland removal in terms compensatory and enhanced planting, where applicable, to offset proposals for forestry/woodland removal.
	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-	S/M/L	There is the potential for direct and indirect negative effects from the siting of wind turbines and associated infrastruct impacts, including guidance on design and siting of proposals, and potential cumulative visual and landscape impacts. National Parks, NSAs and Wild Land, as well as the Strategic Land Use Capacity mapping identifying areas where impa minimised.
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	There is the potential for direct and indirect negative effects on historic and cultural environment, including the settir set out criteria to mitigate impacts
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	There is the potential for direct and indirect negative effects on the integrity of designated sites. The SG will set out constrained by Framework specifically protects sites identified in the Inventory of Gardens and Designed Landscapes and the Inventor

ng of historic and cultural features. The SG will

riteria to mitigate impacts, and the spatial bry of Historic Battlefields.

nfrastructure, in particular on National Parks, lesign and siting of proposals. The Spatial ing identifying areas where impacts on landscape

ociated infrastructure. Where there is no s of landscape. There are opportunities for

cture. The SG will set out criteria to mitigate . The Spatial Framework specifically protects acts on other landscape considerations should be

ng of historic and cultural features. The SG will

riteria to mitigate impacts, and the Spatial ory of Historic Battlefields.

<u>Hydro</u>

				Hydropower
SEA Topic	SEA Objective	Score	Time-scale	Evaluation
luman Health	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potential
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potential
Pop and	SEA 10 – Protect and enhance green infrastructure and networks	+/-	S/M	There is potential for negative effects on green networks through the construction of hydro energy developments and riparian corridors. The SG will set out detailed criteria to mitigate against the loss of existing green networks. Develop significantly enhance existing, and establish new, green networks.
	SEA 12 – Protect and enhance air quality	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potential and resultant improvements to air quality.
	SEA 1 – Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There is potential for loss of, and negative effects on, valuable soil resources which support biodiversity and flora/fau developments and associated infrastructure. The SG will set out criteria to mitigate impacts.
e	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-	S/M/L	There is potential for negative effects on existing land uses and land cover which provide habitat for biodiversity, in p criteria to mitigate impacts.
flora and faur	SEA 4 - Promote the important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value.	+/-	S/M	There is potential for the loss and/or removal of forestry and woodland cover to make way for Hydro energy develop likely to result in negative impacts on associated biodiversity, flora and fauna. The SG will set out criteria to mitigate i enhancement through additional planting.
odiversity	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	There is potential for direct and indirect negative effects on a range of habitats and species, in particular water-based mitigate direct and indirect impacts, and where applicable, opportunities for enhancement.
Bic	SEA 10 - Protect and enhance green infrastructure and networks	+/-	S/M	There is potential for negative effects on green infrastructure and networks through the construction of hydro energy. The SG will set out detailed criteria to mitigate against the loss of existing green infrastructure and networks.
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	There is potential for direct and indirect negative effects on designated sites from the construction of hydro energy d SG will set out criteria to mitigate direct and indirect impacts, and where applicable, opportunities for restoration and
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There is potential for loss of, and negative effects on, carbon rich soils and prime agricultural land from the construction associated infrastructure. The SG will set out criteria to mitigate impacts.
Š	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	There is potential for direct and indirect negative effects on soil-based habitats and species from the construction of infrastructure. The SG will set out criteria to mitigate direct and indirect impacts, and where applicable, opportunities
	SEA 3 – Promote the sustainable management of the water environment	+/-	S/M/L	In the short term, during construction, there could potentially be negative effects on the water environment i.e. from where applicable. There is potential for medium and longer term impacts on the water environment where design an SG will set out criteria to mitigate direct and indirect impacts through guidance on construction and the design and si
Water	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	In the short term, during construction, there can potentially be negative effects on the water environment and associ medium and longer term impacts on the water environment where design and mitigation measures are not impleme direct and indirect impacts through guidance on construction and the design and siting of developments.
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	In the short term, during construction, there can potentially be negative effects on the water environment including of and longer term impacts on the water environment where design and mitigation measures are not implemented. The indirect impacts through guidance on construction and the design and siting of developments.
Clima tic Facto rs	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There are potential for negative effects on carbon rich soils (and other valuable soil resources) from the construction infrastructure. The SG will set out criteria to mitigate impacts.

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al to contribute to renewable energy generation.

Id associated infrastructure, including the loss of pment proposals also offer opportunities to

ial to contribute to renewable energy generation

una from the construction of hydro energy

particular protected sites. The SG will set out

ments and associated infrastructure, which is impacts, and where applicable, opportunities for

protected sites. The SG will set out criteria to

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levelopments and associated infrastructure. The d/or condition-improving.

ion of hydro energy developments and

hydro energy developments and associated s for enhancement.

n construction and decommissioning waste, nd mitigation measures are not implemented. The iting of developments.

iated habitats and species. There is potential for ented. The SG will set out criteria to mitigate

designated sites. There is potential for medium e SG will set out criteria to mitigate direct and

of hydro energy developments and associated

				Hydropower
	SEA 3 - Promote the sustainable management of the water environment	+/-	S/M/L	There is potential for negative effects on the water environment, both during construction and from the developmen including incorporating appropriate mitigation measures. The SG will set out criteria to mitigate any short, medium a
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M	There is potential for the loss and/or removal of forestry and woodland cover to make way for hydro energy develop likely to be associated negative impacts from forestry and woodland removal in terms of climatic conditions where th opportunity for compensatory and enhanced planting, where applicable, to offset proposals for forestry/woodland re
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potenti with associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potenti with associated positive climatic benefits.
	SEA 12 – Protect and enhance air quality	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potenti and resultant improvements to air quality.
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M	There may be potential for the loss of economic benefits associated with agricultural production as a result of direct l criteria to mitigate against impacts as well as identify opportunities for enhancement such as peatland restoration.
Material Assets	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-	S/M	There is potential for loss of and/or negative effects on land uses and land cover(s) which contribute to society from t and associated infrastructure. As part of the Strategic Land Use Capacity mapping, hydro energy developments – at a impacts on these resources will be minimised.
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M	There may be issues with the management and disposal of timber and forestry waste. Hydro energy proposals may o recreational opportunities within existing or new woodland and forested settings.
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potenti
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Hydro energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potenti with associated positive climatic benefits.
	SEA 10 – Protect and enhance, where appropriate, the historic and cultural environment	+/-	S/M/L	There is the potential for direct and indirect effects on historic and cultural environment, including the setting of histocriteria to mitigate impacts, and where applicable, opportunities for enhancement including interpretation.
Cultural Heritage	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-	S/M/L	There is the potential for direct and indirect negative effects from hydro energy developments have and associated in mitigate impacts, including guidance on design and siting of proposals.

nt if not appropriately designed and/or operated, and long-term impacts on the water environment.

ments and associated infrastructure. There is nere is no compensatory planting. There is the emoval.

ial to contribute to renewable energy generation,

ial to contribute to renewable energy generation,

ial to contribute to renewable energy generation

loss of prime agricultural land. The SG will set out

the construction of hydro energy developments a strategic level – will be targeted to areas where

ffer benefits through developing and enhancing

ial to contribute to renewable energy generation.

ial to contribute to renewable energy generation,

coric and cultural features. The SG will set out

nfrastructure. The SG will set out criteria to

				Hydropower
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	There is the potential for direct and indirect negative effects on historic and cultural environment, including the settine set out criteria to mitigate impacts, and where applicable, opportunities for enhancement including opening up buries to develop and promote cultural heritage assets to a wider audience.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	There is the potential for direct and indirect negative effects on the integrity of designated sites. The SG will set out cr
Landscape	SEA 2 – Avoid adverse impacts on existing land use / cover	+/-	S/M/L	There is the potential for direct and indirect negative effects from the construction of hydro energy developments an criteria to mitigate impacts, including guidance on design and siting of proposals.
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M/L	There is potential for the loss and/or removal of forestry and woodland cover to make way for Hydro energy develops there is no compensatory planting, there is likely to be associated negative effects from forestry and woodland remove for compensatory and enhanced planting, where applicable, to offset proposals for forestry/woodland removal.
	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-	S/M/L	There is the potential for direct and indirect negative effects from Hydro energy developments and associated infrast impacts, including guidance on design and siting of proposals, and potential cumulative visual and landscape impacts.
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	There is the potential for direct and indirect negative effects on historic and cultural environment, including the settir set out criteria to mitigate impacts.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	There is the potential for direct and indirect negative effects on the integrity of designated sites. The SG will set out ca

ng of historic and cultural features. The SG will ed sites for investigation during construction and

criteria to mitigate impacts.

nd associated infrastructure. The SG will set out

ments and associated infrastructure. Where val in terms of landscape. There are opportunities

tructure. The SG will set out criteria to mitigate

ng of historic and cultural features. The SG will

riteria to mitigate impacts.

<u>Solar</u>

				Solar
SEA Topic	SEA Objective	Score	Time-scale	Evaluation
Juman Health	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potential
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potential
Pop and	SEA 10 – Protect and enhance green infrastructure and networks	+/-	S/M	There is potential for negative effects on green networks through the removal of existing field boundaries and green of developments and associated infrastructure. The SG will set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries and green of the set out detailed criteria to mitigate against the loss of existing field boundaries against the set out detailed criteria to mitigate against the loss of existing field boundaries against the set out detailed criteria to mitigate against the set out detailed cr
	SEA 12 – Protect and enhance air quality	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potential and resultant improvements to air quality.
	SEA 1 – Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There is potential for loss of, and negative effects on, valuable soil resources which support a variety of species and had developments, particularly during infrastructure construction and where applicable, decommissioning. The SG will set
auna	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-	S/M/L	There is potential for negative effects on existing land uses and land cover which provide habitat for biodiversity, in particular in the provide the providet the
ity, flora and fa	SEA 4 - Promote the important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value.	N/A		No significant effects identified.
Biodiver	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	There is potential for direct and indirect negative effects on a range of habitats and species, in particular protected sit mitigate direct and indirect impacts, and where applicable, opportunities for enhancement.
	SEA 10 - Protect and enhance green infrastructure and networks	+/-	S/M	There is potential for negative effects on green networks through the removal of existing field boundaries and natura developments and associated infrastructure. The SG will set out detailed criteria to mitigate against the loss of existin opportunities for enhancement where applicable.
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	There is potential for direct and indirect negative effects on designated sites from the construction of solar energy de SG will set out criteria to mitigate direct and indirect impacts.
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There is potential for loss of, and negative effects on, carbon rich soils and prime agricultural land from the constructi the construction of infrastructure such as service tracks and electricity transmission infrastructure. The SG will set out
й	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	There is potential for direct and indirect negative effects on soil-based habitats and species from the construction of s associated infrastructure. The SG will set out criteria to mitigate direct and indirect impacts, and where applicable, op
	SEA 3 – Promote the sustainable management of the water environment	+/-	S/M/L	In the short term, during construction, there could potentially be negative effects on the water environment i.e. from longer term impacts on the water environment where design and mitigation measures are not implemented and issue land-cover are not considered, as well as potential impacts from decommissioning where applicable. The SG will set of through guidance on construction and the design and siting of developments.
Water	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	In the short term, during construction, there can potentially be negative effects on the water environment and associ medium and longer term impacts on the water environment where design and mitigation measures are not implement change in land-cover are not considered, as well as potential impacts from decommissioning where applicable. The So indirect impacts through guidance on construction and the design and siting of developments.
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	In the short term, during construction, there can potentially be negative effects on the water environment including of and longer term impacts on the water environment where design and mitigation measures are not implemented and in land-cover are not considered, as well as potential impacts from decommissioning where applicable. The SG will se impacts through guidance on construction and the design and siting of developments.

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corridors during construction of solar energy ng green infrastructure and networks.

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abitats for biodiversity from solar energy to ut criteria to mitigate impacts.

articular protected sites. The SG will set out ments have the potential to positively impact on nit biodiversity. This allows the land to be rested

tes and species. The SG will set out criteria to

al corridors during construction of solar energy ng green infrastructure and networks, and

evelopments and associated infrastructure. The

ion of solar energy developments, in particular t criteria to mitigate impacts.

solar energy developments, in particular oportunities for enhancement.

n construction. There is potential for medium and les such as surface water run-off and change in but criteria to mitigate direct and indirect impacts

iated habitats and species. There is potential for inted and issues such as surface water run-off and G will set out criteria to mitigate direct and

designated sites. There is potential for medium I issues such as surface water run-off and change et out criteria to mitigate direct and indirect

				Solar
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M/L	There are potential for negative effects on carbon rich soils (and other valuable soil resources) from the construction infrastructure. The SG will set out criteria to mitigate impacts.
	SEA 3 - Promote the sustainable management of the water environment	+/-	S/M/L	There is potential for negative effects on the water environment, during construction, operational and decommission operated, including incorporating appropriate mitigation measures. The SG will set out criteria to mitigate any short, environment.
actors	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M	There is potential for the loss and/or removal of forestry and woodland cover to make way for solar energy developm where these form field boundaries within large-scale solar schemes. There is likely to be associated negative impacts climatic conditions where there is no compensatory planting. There is the opportunity for compensatory and enhance for forestry/woodland removal.
Climatic F	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potentia with associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potentia with associated positive climatic benefits.
	SEA 12 – Protect and enhance air quality	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potentia and resultant improvements to air quality. There may also be an effect on the local micro-climate resulting from shad
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-	S/M	There may be potential for the loss of economic benefits associated with agricultural production as a result of direct l criteria to mitigate against impacts as well as identify opportunities for enhancement such as peatland restoration.
	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-	S/M	There is potential for loss of and/or negative effects on land uses and land cover(s) which contribute to society from t and associated infrastructure. As part of the Strategic Land Use Capacity mapping, solar energy developments – at a s impacts on these resources will be minimised.
Material Assets	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M	There may be issues with the management and disposal of timber and forestry waste. Solar energy proposals may off recreational opportunities within woodland and forested settings.
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potentia
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Solar energy developments have significant potential to reduce dependency on fossil fuels and increase PKC potentia with associated positive climatic benefits.
	SEA 10 – Protect and enhance, where appropriate, the historic and cultural environment	+/-	S/M/L	There is the potential for direct and indirect effects on historic and cultural environment, including the setting of histo criteria to mitigate impacts.

of solar energy developments and associated

ning phases if not appropriately designed and/or medium and long-term impacts on the water

ments and associated infrastructure, particularly s from forestry and woodland removal in terms of ced planting, where applicable, to offset proposals

I to contribute to renewable energy generation,

I to contribute to renewable energy generation,

It o contribute to renewable energy generation ding of the solar panels.

loss of prime agricultural land. The SG will set out

the construction of solar energy developments strategic level – will be targeted to areas where

fer benefits through developing and enhancing

I to contribute to renewable energy generation.

I to contribute to renewable energy generation,

oric and cultural features. The SG will set out

				Solar
eritage	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-	S/M/L	There is the potential for direct and indirect negative effects from solar energy developments and associated infrastrubuildings and features. The SG will set out criteria to mitigate impacts, including guidance on design and siting of prop
Cultural I	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	There is the potential for direct and indirect negative effects on historic and cultural environment, including the settir set out criteria to mitigate impacts.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	There is the potential for direct and indirect negative effects on the integrity of designated sites. The SG will set out cr
Landscape	SEA 2 – Avoid adverse impacts on existing land use / cover	+/-	S/M/L	There is the potential for direct and indirect negative effects from the construction of solar energy developments and criteria to mitigate impacts, including guidance on design and siting of proposals, and opportunities for enhancement
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-	S/M/L	There is potential for the loss and/or removal of forestry and woodland cover to make way for solar energy developm is no compensatory planting, there is likely to be associated negative effects from forestry and woodland removal in t compensatory and enhanced planting, where applicable, to offset proposals for forestry/woodland removal.
	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-	S/M/L	There is the potential for direct and indirect negative effects from solar energy developments and associated infrastru impacts, including guidance on design and siting of proposals, and potential cumulative visual and landscape impacts.
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	There is the potential for direct and indirect negative effects on historic and cultural environment, including the settir set out criteria to mitigate impacts.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	There is the potential for direct and indirect negative effects on the integrity of designated sites. The SG will set out cr

ucture, in particular on the setting of historic posals.

ng of historic and cultural features. The SG will

riteria to mitigate impacts.

d associated infrastructure. The SG will set out t.

nents and associated infrastructure. Where there terms of landscape. There are opportunities for

ucture. The SG will set out criteria to mitigate

ng of historic and cultural features. The SG will

criteria to mitigate impacts.

Biomass

				Biomass
SEA Topic	SEA Objective	Score	Time-scale	Evaluation
p and Human Health	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poter generation.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poter generation.
	SEA 10 – Protect and enhance green infrastructure and networks	N/A		No significant effects identified
24	SEA 12 – Protect and enhance air quality	+/-	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poten generation, however there are potential negative effects related to the emission of particulate matter from biomass refer to adopted SG on Air Quality to detail the planning policy requirements for mitigating against the negative impa- matter.
	SEA 1 – Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of low biodiversity value and are difficult for species to move through. The planting of existing vacant and derelict sites negative effects as these areas can be rich in biodiversity. As such any new planting proposals will be required to con species both within the site and those out-with it but which move through it. Potential for secondary negative impact particulate emissions, due to diminished air quality as a result of the widespread adoption of biomass. The avoidance resources, including direct loss, will be strongly advocated in the SG.
	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of identify guidance to support sustainable land use management solutions in respect of biomass planting.
Biodiversity, flora and fauna	SEA 4 - Promote the important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value.	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of low biodiversity value and are difficult for species to move through. The planting of existing vacant and derelict sites negative effects as these areas can be rich in biodiversity. As such any new planting proposals will be required to con species both within the site and those out-with it but which move through it. Potential for secondary negative impact particulate emissions, due to diminished air quality as a result of the widespread adoption of biomass.
	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of low biodiversity value and are difficult for species to move through. The planting of existing vacant and derelict sites negative effects as these areas can be rich in biodiversity. As such any new planting proposals will be required to con species both within the site and those out-with it but which move through it. Potential for secondary negative impact particulate emissions, due to diminished air quality as a result of the widespread adoption of biomass.
	SEA 10 - Protect and enhance green infrastructure and networks	+/-		Biomass energy developments have the potential to result in significant negative effects on green networks as a resu biomass, which have low biodiversity value and are difficult for species to move through.
	SEA 11 - Safeguard the integrity of designated sites	+/-		Biomass energy developments have the potential to result in significant negative effects on designated sites as a result biomass, which have low biodiversity value and are difficult for species to move through. The planting of existing vacuation have significant negative effects as these areas can be rich in biodiversity. As such any new planting proposals will be habitats and species both within the site and those out-with it but which move through it. Potential for secondary new respect of particulate emissions, due to diminished air quality as a result of the widespread adoption of biomass.
Soil	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-		Sensitive soil types should be identified and avoided, and the SG should also promote the avoidance of new planting the application of the UK Forestry Standard and Guidelines and sustainable forest management practices. In addition the right place in order to avoid potential significant negative environmental effects. The measures used to increase forests e.g. extraction of harvesting residues could also contribute to increased soil and water acidification. In additic growing pressure to harvest tree stumps for woodfuel. These include: increased risk of ground damage leading to soil negative effects on water quality.
	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-		Potential negative effects on soils could give rise to adverse effects on habitats and species that are dependent upon

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ential to contribute to renewable energy a facilities which may impact on health. The SG will acts associated with the emission of particulate

f large areas of monoculture biomass, which have for biomass crops could also have significant nsider and be sensitive to existing habitats and cts on biodiversity, particularly in respect of the of any adverse impacts on valuable soil

f large areas of monoculture biomass. The SG will

f large areas of monoculture biomass, which have for biomass crops could also have significant nsider and be sensitive to existing habitats and cts on biodiversity, particularly in respect of

f large areas of monoculture biomass, which have for biomass crops could also have significant nsider and be sensitive to existing habitats and cts on biodiversity, particularly in respect of

ult of the planting of large areas of monoculture

ult of the planting of large areas of monoculture cant and derelict sites for biomass crops could also e required to consider and be sensitive to existing egative impacts on biodiversity, particularly in

g of biomass crops on deep peat soils and promote n, it should seek the targeting of the right tree in biomass yields from existing woodland and on a range of threats are associated with the bil erosion and siltation, with potential secondary

n particular soil conditions.

				Biomass
	SEA 3 – Promote the sustainable management of the water environment	+/-		The measures used to increase biomass yields from existing woodland and forests e.g. extraction of harvesting residu acidification. In addition a range of threats are associated with the growing pressure to harvest tree stumps for wood damage leading to soil erosion and siltation, with potential secondary negative effects on water quality. The SG will s impacts of biomass planting on the water environment and associated species and habitats, including designated site
Water	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-		Potential negative effects on water quality could give rise to adverse effects on water-based habitats and species. The against the impacts of biomass planting on the water environment and associated species and habitats, including des
	SEA 11 - Safeguard the integrity of designated sites	+/-		Potential negative effects on water quality could give rise to adverse effects on water-based designated sites, either of set out guidance to assist in mitigating against the impacts of biomass planting on the water environment and associatives.
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-		Sensitive soil types should be identified and avoided, and the SG should also promote the avoidance of new planting the application of the UK Forestry Standard and Guidelines and sustainable forest management practices. In addition the right place in order to avoid potential significant negative environmental effects.
	SEA 3 - Promote the sustainable management of the water environment	N/A		No significant effects identified
Climatic Factors	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of low biodiversity value and are difficult for species to move through. The planting of existing vacant and derelict sites in negative effects as these areas can be rich in biodiversity. As such any new planting proposals will be required to conspecies both within the site and those out-with it but which move through it. Potential for secondary negative impact a particulate emissions, due to diminished air quality as a result of the widespread adention of biomass.
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poter generation, with associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poter generation, with associated positive climatic benefits.
	SEA 12 – Protect and enhance air quality	+/-	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poter generation, however there are potential negative effects related to the emission of particulate matter from biomass refer to adopted SG on Air Quality to detail the planning policy requirements for mitigating against the negative imparatter.
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	+/-		Sensitive soil types should be identified and avoided, and the SG should also promote the avoidance of new planting the application of the UK Forestry Standard and Guidelines and sustainable forest management practices. In addition the right place in order to avoid potential significant negative environmental effects.
	SEA 2 - Avoid adverse impacts on existing land use/cover	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of identify guidance to support sustainable land use management solutions in respect of biomass planting.
Material Assets	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	+/-		Through the requirement for feedstock for a biomass plant there may be direct loss of forest/woodland cover. The So sustainable stocks of woodfuels.
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poter generation.

ues could contribute to increased soil and water dfuel. These include: increased risk of ground set out guidance to assist in mitigating against the es.

e SG will set out guidance to assist in mitigating signated sites.

directly or from downstream effects. The SG will ated species and habitats, including designated

of biomass crops on deep peat soils and promote n, it should seek the targeting of the right tree in

f large areas of monoculture biomass, which have for biomass crops could also have significant isider and be sensitive to existing habitats and ts on biodiversity, particularly in respect of

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ntial to contribute to renewable energy facilities which may impact on health. The SG will acts associated with the emission of particulate

of biomass crops on deep peat soils and promote , it should seek the targeting of the right tree in

large areas of monoculture biomass. The SG will

G will ensure that biomass proposals include

ntial to contribute to renewable energy

				Biomass
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Biomass energy developments have significant potential to reduce dependency on fossil fuels and increase PKC poten generation, with associated positive climatic benefits.
	SEA 10 – Protect and enhance, where appropriate, the historic and cultural environment	N/A		No significant effects identified
Cultural Heritage	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	N/A		No significant effects identified
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	N/A		No significant effects identified
	SEA 11 – Safeguard the integrity of designated sites	N/A		No significant effects identified
	SEA 2 – Avoid adverse impacts on existing land use / cover	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of identify guidance to support sustainable land use management solutions in respect of biomass planting.
Landscape	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	+/-		Biomass energy developments have the potential to result in significant negative effects as a result of the planting of identify guidance to support sustainable land use management solutions in respect of biomass planting.
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	N/A		No significant effects identified
	SEA 11 – Safeguard the integrity of designated sites	N/A		No significant effects identified

ential to contribute to renewable energy f large areas of monoculture biomass. The SG will f large areas of monoculture biomass. The SG will

Heat Pumps

			Heat Pumps			
SEA Topic	SEA Objective	Score	Time-scale	Evaluation		
op and Human Health	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential to		
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential to		
	SEA 10 – Protect and enhance green infrastructure and networks	N/A		No significant effects identified		
	SEA 12 – Protect and enhance air quality	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential to with associated positive air quality effects.		
	SEA 1 – Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified		
g	SEA 2 - Avoid adverse impacts on existing land use/cover	N/A		No significant effects identified		
Biodiversity, flora and faur	SEA 4 - Promote the important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value.	N/A		No significant effects identified.		
	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	Medium and large-scale water source heat pumps have the potential to negatively affect the diversity of water-based operational and decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design of the set of the		
	SEA 10 - Protect and enhance green infrastructure and networks	N/A		No significant effects identified		
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	Medium and large-scale water source heat pumps have the potential to negatively affect the diversity of water-based operational and decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design of the set of the		
Soil	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified		
	SEA 5 - Conserve and enhance the diversity of habitats and species	N/A		No significant effects identified		
Water	SEA 3 – Promote the sustainable management of the water environment	+/-	S/M/L	Medium and large-scale water source heat pumps have the potential to negatively affect the water environment, du decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p		
	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	Medium and large-scale water source heat pumps have the potential to negatively affect the diversity of water-based operational and decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design the set of the set		
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	Medium and large-scale water source heat pumps have the potential to negatively affect the water environment, du decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p		
Climatic Factors	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified		
	SEA 3 - Promote the sustainable management of the water environment	+/-	S/M/L	Medium and large-scale water source heat pumps have the potential to negatively affect the water environment, du decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p		

o contribute to renewable energy generation.
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d habitats and species, during construction, gn and siting of proposals.
d habitats and species, during construction, gn and siting of proposals.
ring construction, operation and roposals and sustainable construction methods.
d habitats and species, during construction, gn and siting of proposals.
ring construction, operational and roposals and sustainable construction methods.
ring construction, operational and roposals and sustainable construction methods.

				Heat Pumps
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential t with associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential t with associated positive climatic benefits.
	SEA 12 – Protect and enhance air quality	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential t with associated positive air quality effects.
Material Assets	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land. carbon rich soils	N/A		No significant effects identified
	SEA 2 - Avoid adverse impacts on existing land use/cover	N/A		No significant effects identified
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential t
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Heat pump technologies have significant potential to reduce dependency on fossil fuels and increase PKC potential t with associated positive climatic benefits.
	SEA 10 – Protect and enhance, where appropriate, the historic and cultural environment	N/A		No significant effects identified
Cultural Heritage	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	N/A		No significant effects identified
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	Heat pump technologies have potential direct and indirect negative effects on historic buildings and cultural feature criteria to mitigate impacts, including guidance on design and siting of proposals.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	Heat pump technologies have potential direct and indirect negative effects on designated historic buildings and cult will set out criteria to mitigate impacts, including guidance on design and siting of proposals.

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ural features where sited inappropriately. The SG

				Heat Pumps
Landscape	SEA 2 – Avoid adverse impacts on existing land use / cover	N/A		No significant effects identified
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	N/A		No significant effects identified
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	Heat pump technologies have potential direct and indirect negative effects on historic buildings and cultural features criteria to mitigate impacts, including guidance on design and siting of proposals.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	Heat pump technologies have potential direct and indirect negative effects on designated historic buildings and cultu will set out criteria to mitigate impacts, including guidance on design and siting of proposals.

where sited inappropriately. The SG will set out
ral features where sited inappropriately. The SG

Other Renewables

				Other Renewables
SEA Topic	SEA Objective	Score	Time-scale	Evaluation
Pop and Human Health	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and increasing generation.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and increasing generation.
	SEA 10 – Protect and enhance green infrastructure and networks	N/A		No significant effects identified
	SEA 12 – Protect and enhance air quality	+/-	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and increasing generation, with associated positive air quality effects. However, anaerobic digestion, energy from waste and result in negative air quality impacts from particular matter emissions.
	SEA 1 – Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified
g	SEA 2 - Avoid adverse impacts on existing land use/cover	N/A		No significant effects identified
diversity, flora and faun	SEA 4 - Promote the important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value.	N/A		No significant effects identified.
	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-/?	S/M/L	Hydro micro-generation schemes have the potential to negatively affect the diversity of water-based habitats and spe decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p
Bic	SEA 10 - Protect and enhance green infrastructure and networks	N/A		No significant effects identified
	SEA 11 - Safeguard the integrity of designated sites	+/-/?	S/M/L	Hydro micro-generation schemes have the potential to negatively affect the integrity of water-based designated sites decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p
Soil	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified
	SEA 5 - Conserve and enhance the diversity of habitats and species	N/A		No significant effects identified
Water	SEA 3 – Promote the sustainable management of the water environment	+/-	S/M/L	Hydro micro-generation schemes have the potential to negatively affect the water environment, during construction. SG will set out criteria to mitigate impacts, including guidance on design and siting of proposals.
	SEA 5 - Conserve and enhance the diversity of habitats and species	+/-	S/M/L	Hydro micro-generation schemes have the potential to negatively affect the diversity of water-based habitats and sp decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p
	SEA 11 - Safeguard the integrity of designated sites	+/-	S/M/L	Hydro micro-generation schemes have the potential to negatively affect the integrity of water-based designated sites decommissioning phases. The SG will set out criteria to mitigate impacts, including guidance on design and siting of p
Clima tic Facto rs	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified

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rease PKC potential to contribute to renewable d landfill gas technologies have the potential to

pecies, during construction, operational and proposals.

es, during construction, operational and proposals.

, operational and decommissioning phases. The

pecies, during construction, operational and proposals.

es, during construction, operational and proposals and sustainable construction methods.

				Other Renewables
	SEA 3 - Promote the sustainable management of the water environment	+/-	S/M/L	Hydro micro-generation schemes have the potential to negatively affect the water environment, during construction SG will set out criteria to mitigate impacts, including guidance on design and siting of proposals.
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and incr energy generation, with associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and increasing generation, with associated positive climatic benefits.
	SEA 12 – Protect and enhance air quality	+/-	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and incr energy generation, with associated positive air quality benefits. However, anaerobic digestion, energy from waste an result in negative air quality impacts from particular matter emissions.
	SEA 1 - Avoid adverse impacts on valuable soil resources e.g. prime agricultural land, carbon rich soils	N/A		No significant effects identified
	SEA 2 - Avoid adverse impacts on existing land use/cover	N/A		No significant effects identified
Material Assets	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 6 – Increase the potential of Perth and Kinross in contributing to Scotland's renewable energy resources	++	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and increase energy generation, with associated positive climatic benefits.
	SEA 7 – Support Adaptation to climate change and 'future proofing' of new development	++	S/M/L	Other renewable technologies and processes have significant potential to reduce dependency on fossil fuels and increasing generation, with associated positive climatic benefits.
	SEA 10 – Protect and enhance, where appropriate, the historic and cultural environment	+/-	S/M/L	Micro-generation and other renewable technologies may enhance historic buildings by providing affordable heating more affordable to repair, maintain and use. There may also be negative impacts on some historic buildings due to in will set out criteria to mitigate against any negative impacts including guidance on design and siting.
Cultural Heritage	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	N/A		No significant effects identified
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	Micro-generation and other renewable technologies may enhance historic buildings by providing affordable heating more affordable to repair, maintain and use. There may also be negative impacts on some historic buildings due to in will set out criteria to mitigate against any negative impacts including guidance on design and siting.

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rease PKC potential to contribute to renewable nd landfill gas technologies have the potential to

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and energy, which may allow them to become nappropriate design and siting, however the SG

and energy, which may allow them to become nappropriate design and siting, however the SG

				Other Renewables
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	Micro-generation and other renewable technologies may enhance designated historic buildings by providing affordab become more affordable to repair, maintain and use. There may also be negative impacts on some designated histori siting, however the SG will set out criteria to mitigate against any negative impacts including guidance on design and
Landscape	SEA 2 – Avoid adverse impacts on existing land use / cover	N/A		No significant effects identified
	SEA 4 – Promote important role and potential of forests and woodlands and avoid adverse impacts on their natural heritage value	N/A		No significant effects identified
	SEA 8 – Conserve and enhance the character, local distinctiveness, scenic and cultural value of the area's landscape	N/A		No significant effects identified
	SEA 9 – Protect and enhance, where appropriate, the historic and cultural heritage	+/-	S/M/L	Micro-generation and other renewable technologies may enhance historic buildings by providing affordable heating a more affordable to repair, maintain and use. There may also be negative impacts on some historic buildings due to inwill set out criteria to mitigate against any negative impacts including guidance on design and siting.
	SEA 11 – Safeguard the integrity of designated sites	+/-	S/M/L	Micro-generation and other renewable technologies may enhance designated historic buildings by providing affordab become more affordable to repair, maintain and use. There may also be negative impacts on some designated histori siting, however the SG will set out criteria to mitigate against any negative impacts including guidance on design and s

ble heating and energy, which may allow them to ic buildings due to inappropriate design and siting.

and energy, which may allow them to become nappropriate design and siting, however the SG

ble heating and energy, which may allow them to ic buildings due to inappropriate design and siting.