Strategic Options Group	Tayside			
Local Authorities	**Perth and Kinross, Dundee City and Angus Council**			
Assessment Criteria	**Y / N**	**Assessors Comments (WSAC)**	**Referred to WSAG**	**WSAG Comments**
(a) Are any processes included in the SOC/OBC preferred option which was not included in the Area Waste Plan BPEO?	N	**Decision:** There are no new processes put forward in the SOC that are not already in the Tayside BPEO (2003) and therefore does not need to be referred to the WSAG **Background:** Recycling, Composting and Energy from Waste are the waste management processes outlined in the Area Waste Plan and the SOC	N	
(b) Have specific processes been included in the SOC/OBC where the Area Waste Plan had deferred the decision until a later date?	N	**Decision:** There are no deferred process decisions in the AWP and therefore the SOC is compliant with the BPEO. **AWP states:** Pg 33 Section 3.2.5 states that "…before 2020 consideration will have to be given to a replacement for DERL" the SOC is outlining additional EfW capacity in the area not as a replacement to DERL but as additional capacity. The AWP assumed DERL had a capacity of 120,000 tonnes per annum (pg 14, 2003) **SOC states:** More recent data (LAWAS) and DERL experience has informed the SOC process and the capacity of DERL is now assumed to be 105,000 tonnes per annum. The BPEO also assumed PKC would be able to meet it's EfW needs via DERL. The BPEO states by 2020 111,000 (29%) of Tayside municipal waste would be sent to DERL for energy recovery. This therefore, given the change in DERLs capacity and assuming AWP data, leaves a deficit of 6,000 tonnes/annum which needs to be recovered for energy else where. However it should be noted that the BPEO and SOC tonnages vary due to more updated data/assumptions being used in the SOC. The expected tonnages to achieve the BPEO target of 29% EfW by 2020	N	

		but using SOC data would actually be 107,000 therefore could actually be met by DERL. However the SOC has outlined a 38% of EfW to ensure that PKC are fully Landfill Allowance Compliant		
(c) (i) Do the accumulated tonnages of the SOC/OBC preferred Option(s) alter the Area Waste Plan BPEO percentages ? *(delete if c ii is applicable)*	Y (c)(i)	**Decision:** Due to uncertainty, especially when noting the differences by 2020, the decision was referred to the WSAG (25th April 2006) **Background:** The tables below show the difference between the BPEO and SOC target % and tonnages. The difference predominantly stem from the assumption that BMW was 60% and 63% of MSW in the AWP and SOC respectively. In addition AWP assumed 2% growth rate until 2020 while the SOC assumed a 2.4% between 2005-07, 2.3% between 2008-09, 1.7% between 2010 -14 and 1.6% between 2015-18 and zero growth thereafter. *NB: SOC counts bottom ash(aprox 6%) and reuse material(c3%) as recycling and the BPEO does not, therefore would suggest that 9% is taken of each of the SOC recycling targets to get a fair comparison. Fly ash is counted in landfill in the SOC* SOC % is taken from the Project Summary and tonnages from Waste modelling amended version to represent summated option (eg ad A25 in Notes table) NB can not get SOC tonnages to add up and recommended 9% not taken of the SOC recycle target yet 2013	Yes (25th April)	WSAG Groups comments: The Waste Strategy Area Group recognised that there was a significant difference between the BPEO and SOC from 2020 onwards but not in 2010 and 2013. This significant difference in 2020 is emphasised by the removal of over 9% (bottom ash (6%) and reuse (3%)) from the SOC recycling percentage. These percentages were not included in the AWP recycling figure. The Waste Strategy Area Group noted however that the SOC is based upon more accurate data derived from larger and more proven recycling schemes. For example the SOC reports that the actual tonnes per household recycled and composted are greater than the national average see table below (ref. Waste Modelling Assumptions Report 3 Appendix 1 of SOC) This in turn derives the tonnage throughput for the capacity of the waste management infrastructure as stated in the SOC. It is imperative that the design of these facilities is based on more informed and realistic figures in order to provide much needed certainty for the local authorities and the private sector when negotiating and meeting, contracted tonnages. In addition the group noted that the current household coverage for kerbside collection is as follows indicating that the majority of the kerbside roll out has occurred – • **Angus -75%(May 06) 83% by June 06** • **Dundee City -** paper collection 80%, green waste 56%, kerbside box system to 24% of properties. There is a high proportion of tenement properties, and are awaiting the outcome of the SE Multi-occupancy • **Perth and Kinross** 85%

Process	AWP %	AWP tonnage	SOC %	SOC tonnage
Recycling	19	61,000	29	92,205
Composting	11	34,000	15	48,100
EfW	31	97,000	37	117,633
Landfill	39	122,000	19	62,325
MSW	100	314,000	100	320,263

Process	AWP %	AWP tonnage	SOC %	SOC tonnage

Recycling	25	84,000	30	102,340
Composting	12	39,000	15	49,896
EfW	30	102,000	41	138,037
Landfill	33	109,000	14	46,685
MSW	100	334,000	100	336,960

2020

Process	AWP %	AWP tonnage	SOC %	SOC tonnage
Recycling	33	127,000	31	116,551
Composting	14	52,000	14	52,049
EfW	29	111,000	38	141,537
Landfill	24	92,500	17	61,486
MSW	100	383,000	100	371,623

There are tonnage and % difference between the SOC and BPEO notably in 2020 and that it will be even greater if the recommended 9% is taken off the SOC to account for bottom ash and reuse.

There is also a significant increase in diversion from landfill to EfW in the SOC compared to the BPEO.

The Waste Strategy Area Group highlighted that the Energy from Waste tonnages were derived after the full impact of recycling and composting options had been taken into account. Therefore Energy from Waste only takes residual waste material from landfill and does not impact upon recycling and composting rates

Performance rates for the new multi-material and mixed organic collection schemes as reported In the SOC:

	Performance t/hh/y	
Local Authority	**Co-mingled**	**Mixed Organic**
Angus	0.215	Currently 0.15 SOC est. 0.188 to 0.2 by 2012
Dundee City	0.107	0.196 to 0.2 by 2012
Perth & Kinross	0.252	0.252 from 2008
NATIONAL	0.200	0.2 – 0.29 in UK and Europe

The group also noted that it is difficult to compare the SOC against BPEO as they are not like for like. The list below outlines some of the variants discussed by the group which make BPEO – SOC comparison difficult:

- The SOC runs to 2036 while the BPEO only runs to 2020.
- The Waste Strategy Area Group also highlighted the fact that the Landfill Allowance Scheme was not a significant driver when developing the AWP, but was in the development of the SOC.
- Varied data assumptions – including growth rate, performance, recycling activities

The Waste Strategy Area Group felt strongly that the compliance with the BPEO had been a key driver throughout the production of the SOC and

				that the waste management infrastructure detailed in the SOC's preferred solution was a balance between the economic and environmental drivers.
(c) (ii) Do the tonnages of the SOC/OBC preferred Option(s) in addition to the respective SOC/OBC of the wider Waste Strategy Area equate to the Area Waste Plan BPEO percentages *(delete C(i) if applicable)*		n/a		
(d) Has the number and/or capacity for individual plants identified in the Area Waste Plan significantly altered ?	y	**Decision:** Due to uncertainty the decision was referred to the WSAG (25th April 2006) **AWP states:** Table 3.6 Page 35 of the Tayside AWP (2003) provides a table outlining the "Indicative Infrastructure required to Implement Tayside BPEO for Municipal Solid Waste". For example: • 1 or 2 MRFs in Dundee or Perth. 61,000, 84,000, 127,000 tonnes/an in 2010, 2013, 2020 respectively. It does however state that the most preferable location would be next to rail head. • 34,000 , 39,000, 52,000 Modular Invessel capacity in 2010, 2013, 2020 respectively. It states that one central invessel to deal with kitchen putrecibles maybe an option Therefore they are in line with the BPEO. However Page 32 Section 3.2.5 of the Tayside AWP (2003) states that "DERL will require to be shared between, at least, the three authorities" if the targets are to be met"… and can only treat residual waste, that is not suitable for recycling/reuse/composting, as supported by SEPA Thermal Treatment Guidance. It also states that "…before 2020 consideration will have to be given to a replacement for DERL" **SOC states:** The SOC outlines the requirement for: • 3 invessel facilities at 15,000 tonnes/an each,	Yes (25th April)	Group comments: In terms of facilities (size and numbers) the SOC is compliant with the BPEO, the AWP looked at processes while the SOC is looking at specific facilities and locations. • EfW capacity has increased, despite maximising recycling and composting rates, to take account of the Landfill Allowance Scheme which was a significant driver in the production of the SOC. • If the EfW is taken as part of a holistic solution diversion targets are met and exceeded. If however EfW is the only option provided then by 2020 Perth and Kinross Council only just meet Diversion targets. The MRF and IVC options on their own do not allow Perth and Kinross Council to meet the landfill diversion targets. • Due to the above the BPEO EfW capacity can not be met by DERL and requires an additional EfW plant of some 60,000 tonnes per annum (tpa) to meet Perth and Kinross Councils landfill diversion targets. Angus Council and Dundee City Council, through the SOC, both utilise the full capacity at DERL through their contracted tonnages.

		• 1 MRF at 16,000 tonnes/an • 1 EfW at 60,000 tonnes/an The SOC has stated that additional EfW capacity of 60,000t/a is required to meet PKC landfill diversion allocation. This additional capacity is a result of: • the decreased assumed DERL capacity (from 120,000 t/a in BPEO to 105,000t/a in SOC), • change in assumed BMW % (from 60 to 63% of MSW) • PKC not having a formal contract with DERL • PKC need to meet landfill diversion targets. The SOC has stated that the additional 60,000t/a EfW capacity is required for Perth and Kinross Council to meet PKC EfW and landfill diversion targets.		

BPEO Compliance Decision	yes
Referred to Full BPEO Review	no
Assessor (Waste Strategy Area Co-ordinator)	Emma Taylor
Date Assessment Completed	9th May
Date Reviewed by (Environmental Partnership Unit Manger)	15th May
Date Reviewed by NWS Programme Co-ordinator *(if applicable)*	
Date Letter Sent to Scottish Executive	