

# Template

## Proposal Content Document

**Table 1:** General proposal content description

<b>Proposal title</b>	Narrogin FutureEnergy Park
<b>Proponent name</b>	FutureEnergy Australia (FEA)
<b>Short description</b>	<p>The proposal will involve the construction and operation of a renewable diesel biorefinery to convert (via high temperature pyrolysis) lignocellulose feedstock into syngas and then into renewable diesel, biochar and wood vinegar.</p> <p>The proposal is located on cleared agricultural land within the wheatbelt region of Western Australia in the Shire of Narrogin. The surrounding land uses are agriculture and transportation.</p> <p>The proposal will involve the construction of a renewable diesel biorefinery that will include, a feedstock receival area, woodchip drying beds, feedstock conveyors, biorefinery reactors, distillation chambers a thermal oxidiser, internal roads, administrative office buildings and wastewater sewage system.</p> <p>The proposal will involve the discharge of particulate (dust) emissions during construction and gaseous emissions during operations. The proposal may also include clearing of three isolated paddock trees.</p>

**Table 2:** Proposal content elements

<b>Proposal element</b>	<b>Location / description</b>	<b>Maximum extent, capacity or range</b>
<b>Physical elements</b>		
Physical element 1 – disturbance of soil	Figures 2 and 3	Disturbance of 10.155 ha within a Development Envelope of 10.656 ha.
Physical element 2 – clearing of native vegetation	Figure 3	Clearing of up to 3 isolated paddock trees within the Disturbance footprint of 10.155 ha.
<b>Construction elements</b>		
Construction element 1 – particulate emissions	Figure 3	Emissions of dust during construction that will be readily managed using standard dust suppression techniques.
<b>Operational elements</b>		
Operational element 1 – gaseous emissions	Section 6.6.7, 6.6.7.1	Discharge of gaseous emissions post combustion in the Thermal Oxidiser are not expected to exceed the NEMP ambient air

Proposal element	Location / description	Maximum extent, capacity or range
		quality guideline limits at sensitive receptors.
Operational element 2 – noise emissions	Section 7 Tables 7-7, 7-8, 7-9. 7-10	Emissions of noise during operation of the biorefinery are expected to be below the EPA noise regulations assigned noise levels.
<b>Proposal elements with greenhouse gas emissions</b>		
Operation elements:		
Section 8.5.5.1	Scope 1 - 28,105 kg CO <sub>2</sub> -e pa (0.1% of total carbon emissions)	
	Scope 2 - 31,103,859 kg CO <sub>2</sub> -e pa (81.1% of total carbon emissions)	
	Scope 3 - 7,204,257 kg CO <sub>2</sub> -e pa (18.8% of total carbon emissions)	
<b>Rehabilitation</b>		
Following decommissioning of the biorefinery, any contamination of soil not remediated during operations will be cleaned up and contaminated soil removed and disposed to an offsite licensed facility. The land will be rehabilitated and/or remediated to facilitate future development in accordance with the existing zoning of Special Use Area (SU5) under Local Planning Scheme No. 2.3 that includes a Special Rural Precinct and Rural Enterprise Precinct.		
<b>Commissioning</b>		
A detailed commissioning plan will be developed and submitted to DWER as a part of the Works Approval Application process for the relevant prescribed premises (categories 37, 60 or 61A). This will include a detailed commissioning plan for the biorefinery reactors and the thermal oxidiser.		
<b>Decommissioning</b>		
The biorefinery bioreactors and thermal oxidiser will be fully decommissioned at the completion of their useful life and will be deconstructed and removed from site to an appropriate metal recycling or licensed disposal facility. Other components such as the large sheds and administrative buildings will either be deconstructed and removed from site to an appropriate recycling or licensed disposal facility, will be sold insitu with the sale of the land or sold and relocated to another premises. All services (electricity, water pipelines, sewage tanks) will be decommissioned and will remain buried onsite. A decommissioning plan will be submitted and approved by the Shire of Narrogin.		
<b>Other elements which affect extent of effects on the environment</b>		
Proposal time*	Maximum project life	30 years
	Construction phase	18 months
	Operations phase	30 years
	Decommissioning phase	2 years

