

## Appendix 3 Scenario Profiles and Assumptions

## 1.0 What is Scenario Mapping / Planning?

Scenario Planning is a tool to help stakeholders and others better understand the implications of change and assist consultation on how to manage potential futures more effectively.

We are at an interim stage in developing the scenarios and the figures used are provisional and still being developed. The scenario planning process can be used to highlight:

- Principal factors that create or drive change e.g. jobs, people, demand for services
- Provides based on percentage assumptions a better understanding of the range of change that might occur e.g. population growth / proportion of local versus new jobs
- Provides an explanation of likely outcomes based on understanding of existing baseline

Scenarios are widely used by various organisations and groups to assess change and help to inform views and future decisions. The information can inform debate by looking at existing facilities or experience and making assumptions about possible futures.



## 2.0 Key Issues influencing Benefits & Impacts

The key factors influencing change relative to the Onshore O&M Scenario Mapping include:

- Nature of O&M Scenario
  - Onshore, Offshore Platform, Offshore Mothership, Onshore plus Mothership
- People required for each O&M Scenario
  - Onshore, Offshore - Tiree based Staff / Local jobs / Incoming workers
- Employment Profile for each O&M Scenario
  - Job Description / Skills Required / Training Support / Commitment to Local Job access
- Need & Implications for Community Infrastructure
  - Housing, Education and Healthcare and Lifeline service provision and Way of Life
- Need and Implications for Transport Infrastructure
  - Harbour upgrading , road access, ferry capacity, workboat facilities, helicopter access
- Need and Implications for Physical Infrastructure
  - Office, Workshop, Land Area, Maintenance Space, Harbour, ICT.



### 3.0 Scenario Development

New employment and the additional people this might bring to Tiree are one of the key factors that influence change.

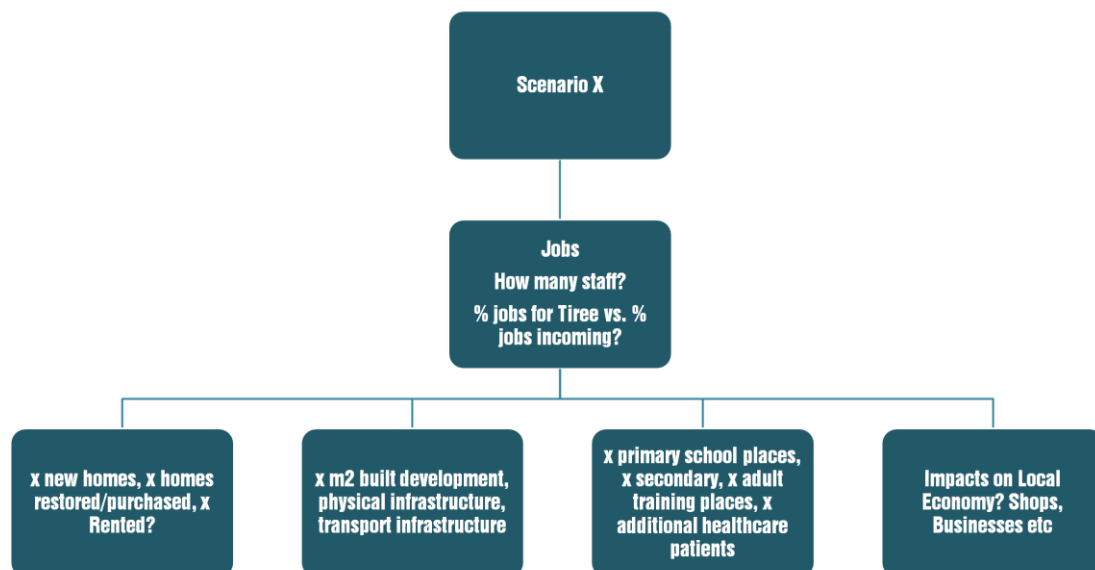
Jobs offer benefits and create impacts and have potential to provide employment for existing residents and young people. Employment and issues and opportunities arising from it were a key issue raised at Consultation Event No 1. The anticipated number of Tiree based jobs (FTE) ranges from 0 to 150 across the 4 O&M Scenarios.

#### Employment – Direct vs. Indirect

New employment will create direct and indirect jobs. The direct jobs are created through employment directly servicing the proposed offshore array. Indirect jobs are created from the ancillary support and demand for local goods and services e.g.

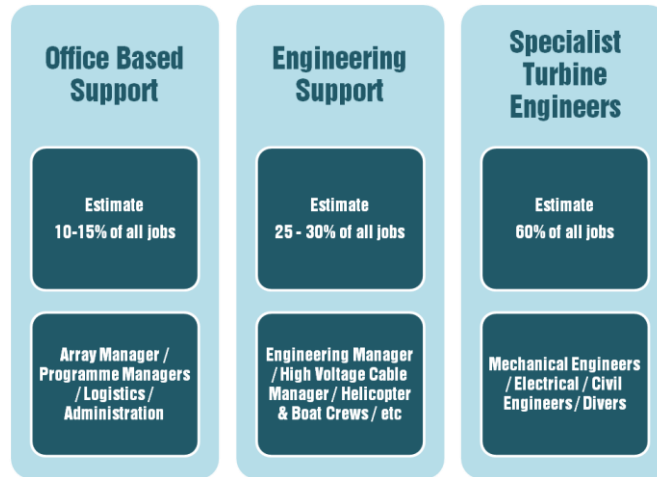
- Additional jobs in local shops / hotels
- Distribution

It might be estimated that indirect jobs are created within the order of 10% of direct jobs. The Economic Assessment will provide further detail.



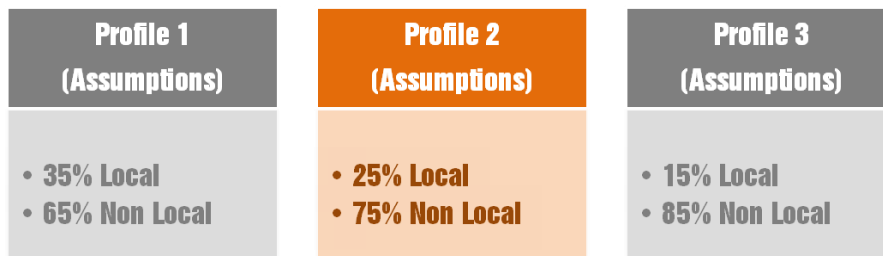
### Job Types

Recognising that new employment and the additional people this might bring to Tiree are one of the key factors that influences change we use profiles to look at likely job opportunities available. Job requirements have been estimated based on broadly comparable O&M facilities and can be broadly broken down as follows:



### Job Profiles – Local vs. Non Local

In order to assess the likely implications on Tiree, we need to look at how many of the potential jobs that could be available in O&M may be filled by those already resident on Tiree vs. those coming to Tiree i.e. Local vs. Non Local Jobs. We have looked at 3 different profiles:



Jobs are Full Time Job Equivalents (FTE) which means that some of these jobs will be part time or seasonal and offer flexible posts for both men and women. The Scenario Planning exercise only looks at assumptions of the direct jobs at this stage.

The Non-Local Jobs are those with greatest potential to bring change to Tiree – we have assumed 70% are single and 30% would bring a family. This allows a range of assessments to be presented in respect to housing provision requirements, school places, healthcare requirements and overall population growth.

We have applied the profiling to Scenarios 1, 2, 3 and 4 to provide and understanding of potential implications.

## 4.0 Scenario Development

### 4.1 Scenario 1 – O&M Base on Tiree

Profile 1 (35% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		150
% Local	35%	53
% Non Local (relocations)	65%	98
Employees (with families)	30%	29
Employees (without family)	70%	68
Socio Economic		
Family		
New Homes Built	40%	12
Existing Homes Restored / Purchased	30%	9
Other + Rented /PT Residents)	30%	9
Single Professional		
New Homes Built	20%	14
Existing Homes Restored / Purchased	30%	20
Other + Rented /PT Residents)	50%	34
Built Development		

Profile 2 (25% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		150
% Local	25%	38
% Non Local (relocations)	75%	113
Employees (with families)	30%	34
Employees (without family)	70%	79
Socio Economic		
Family		
New Homes Built	40%	14
Existing Homes Restored / Purchased	30%	10
Other + Rented /PT Residents)	30%	10
Single Professional		
New Homes Built	20%	16
Existing Homes Restored / Purchased	30%	24
Other + Rented /PT Residents)	50%	39
Built Development		

Profile 3 (15% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		150
% Local	15%	23
% Non Local (relocations)	85%	128
Employees (with families)	30%	38
Employees (without family)	70%	89
Socio Economic		
Family		
New Homes Built	40%	15
Existing Homes Restored / Purchased	30%	11
Other + Rented /PT Residents)	30%	11
Single Professional		
New Homes Built	20%	18
Existing Homes Restored / Purchased	30%	27
Other + Rented /PT Residents)	50%	45
Built Development		

Profile 1 (35% Local Jobs)		
Economic		
Offices (m2)	m2	600
Workshops / Support (m2)	m2	2500
Site (laydown+parking) (m2)	m2	2000
<b>Community Infrastructure</b>		
Primary School Places (0.27)		8
Secondary School Places (0.2)		6
Educational Bursaries		3
Adult Training / Apprenticeships		5
Additional Healthcare Patients		124
Population Growth		124
<b>Environment</b>		
Major Infrastructure	New Harbour	
Helicopter Return Flights Per Day	7 to 12	
Building Land Take	m2	5100
Water (daily personal consumption - 200l per day)	l/day	24765
Water (O&M Consumption)	l/day	73440
Electricity (domestic) kVA	kVA	76
Electricity (O&M) kVA	kVA	233

Profile 2 (25% Local Jobs)		
Economic		
Offices (m2)	m2	600
Workshops / Support (m2)	m2	2500
Site (laydown+parking) (m2)	m2	2000
<b>Community Infrastructure</b>		
Primary School Places (0.27)		9
Secondary School Places (0.2)		7
Educational Bursaries		3
Adult Training / Apprenticeships		5
Additional Healthcare Patients		143
Population Growth		143
<b>Environment</b>		
Major Infrastructure	New Harbour	
Helicopter Return Flights Per Day	7 to 12	
Building Land Take	m2	5100
Water (daily personal consumption - 200l per day)	l/day	28575
Water (O&M )	l/day	73440
Electricity (domestic) kVA	kVA	88
Electricity (O&M) kVA	kVA	233

Profile 3 (15% Local Jobs)		
Economic		
Offices (m2)	m2	600
Workshops / Support (m2)	m2	2500
Site (laydown+parking) (m2)	m2	2000
<b>Community Infrastructure</b>		
Primary School Places (0.27)		10
Secondary School Places (0.2)		8
Educational Bursaries		3
Adult Training / Apprenticeships		4
Additional Healthcare Patients		162
Population Growth		162
<b>Environment</b>		
Major Infrastructure	New Harbour	
Helicopter Return Flights Per Day	7 to 12	
Building Land Take	m2	5100
Water (daily personal consumption - 200l per day)	l/day	32385
Water (O&M Consumption)	l/day	73440
Electricity (domestic) kVA	kVA	99
Electricity (O&M) kVA	kVA	233

## 4.2 Scenario 2 – Offshore Platform

Profile 1 (35% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		0
% Local	35%	0
% Non Local (relocations)	65%	0
Employees (with families)	30%	0
Employees (without family)	70%	0
Socio Economic		
Family		
New Homes Built	40%	0
Existing Homes Restored / Purchased	30%	0
Other + Rented /PT Residents)	30%	0
Single Professional		
New Homes Built	20%	0
Existing Homes Restored / Purchased	30%	0
Other + Rented /PT Residents)	50%	0
Built Development		
Offices (m2)	m2	0
Workshops / Support (m2)	m2	0
Site (laydown+parking)	m2	0

Profile 2 (25% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		0
% Local	25%	0
% Non Local (relocations)	75%	0
Employees (with families)	30%	0
Employees (without family)	70%	0
Socio Economic		
Family		
New Homes Built	40%	0
Existing Homes Restored / Purchased	30%	0
Other + Rented /PT Residents)	30%	0
Single Professional		
New Homes Built	20%	0
Existing Homes Restored / Purchased	30%	0
Other + Rented /PT Residents)	50%	0
Built Development		
Offices (m2)	m2	0
Workshops / Support (m2)	m2	0
Site (laydown+parking)	m2	0

Profile 3 (15% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		0
% Local	15%	0
% Non Local (relocations)	85%	0
Employees (with families)	30%	0
Employees (without family)	70%	0
Socio Economic		
Family		
New Homes Built	40%	0
Existing Homes Restored / Purchased	30%	0
Other + Rented /PT Residents)	30%	0
Single Professional		
New Homes Built	20%	0
Existing Homes Restored / Purchased	30%	0
Other + Rented /PT Residents)	50%	0
Built Development		
Offices (m2)	m2	0
Workshops / Support (m2)	m2	0
Site (laydown+parking)	m2	0

Profile 1 (35% Local Jobs)		
Economic		
(m2)		
<b>Community Infrastructure</b>		
Primary School Places (0.27)		0
Secondary School Places (0.2)		0
Educational Bursaries		3
Adult Training / Apprenticeships		3
Additional Healthcare Patients		0
Population Growth		<b>0</b>
Environment		
Major Infrastructure		None
Helicopter Return Flights Per Day		occasional
Water (daily personal consumption - 200l per day)	l/day	0
Water (O&M Consumption)	l/day	0
Electricity (domestic) kVA	kVA	0
Electricity (O&M) kVA	kVA	0

Profile 2 (25% Local Jobs)		
Economic		
(m2)		
<b>Community Infrastructure</b>		
Primary School Places (0.27)		0
Secondary School Places (0.2)		0
Educational Bursaries		3
Adult Training / Apprenticeships		3
Additional Healthcare Patients		0
Population Growth		<b>0</b>
Environment		
Major Infrastructure		None
Helicopter Return Flights Per Day		occasional
Water (daily personal consumption - 200l per day)	l/day	0
Water (O&M Consumption)	l/day	0
Electricity (domestic) kVA	kVA	0
Electricity (O&M) kVA	kVA	0

Profile 3 (15% Local Jobs)		
Economic		
(m2)		
<b>Community Infrastructure</b>		
Primary School Places (0.27)		0
Secondary School Places (0.2)		0
Educational Bursaries		3
Adult Training / Apprenticeships		3
Additional Healthcare Patients		0
Population Growth		<b>0</b>
Environment		
Major Infrastructure		None
Helicopter Return Flights Per Day		occasional
Water (daily personal consumption - 200l per day)	l/day	0
Water (O&M Consumption)	l/day	0
Electricity (domestic) kVA	kVA	0
Electricity (O&M) kVA	kVA	0



### 4.3 Scenario 3 – Motherships

Profile 1 (35% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		25
% Local	35%	9
% Non Local (relocations)	65%	16
Employees (with families)	30%	5
Employees (without family)	70%	11
Socio Economic		
Family		
New Homes Built	40%	2
Existing Homes Restored / Purchased	30%	1
Other + Rented /PT Residents)	30%	1
Single Professional		
New Homes Built	20%	2
Existing Homes Restored / Purchased	30%	3
Other + Rented /PT Residents)	50%	6
Built Development		
Offices	m2	150
Workshops / Hangar	m2	500
Site Ancillary	m2	250
Community		

Profile 2 (25% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		25
% Local	25%	6
% Non Local (relocations)	75%	19
Employees (with families)	30%	6
Employees (without family)	70%	13
Socio Economic		
Family		
New Homes Built	40%	2
Existing Homes Restored / Purchased	30%	2
Other + Rented /PT Residents)	30%	2
Single Professional		
New Homes Built	20%	3
Existing Homes Restored / Purchased	30%	4
Other + Rented /PT Residents)	50%	7
Built Development		
Offices	m2	150
Workshops / Hangar	m2	500
Site Ancillary	m2	250
Community Infrastructure		

Profile 3 (15% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		25
% Local	15%	4
% Non Local (relocations)	85%	21
Employees (with families)	30%	6
Employees (without family)	70%	15
Socio Economic		
Family		
New Homes Built	40%	3
Existing Homes Restored / Purchased	30%	2
Other + Rented /PT Residents)	30%	2
Single Professional		
New Homes Built	20%	3
Existing Homes Restored / Purchased	30%	4
Other + Rented /PT Residents)	50%	7
Built Development		
Offices	m2	150
Workshops / Hangar	m2	500
Site Ancillary	m2	250
Community Infrastructure		

Profile 1 (35% Local Jobs)		
Economic		
<b>Infrastructure</b>		
Primary School Places (0.27)		1
Secondary School Places (0.2)		1
Educational Bursaries		3
Adult Training / Apprenticeships		5
Additional Healthcare Patients		21
Population Growth		21
Environment		
Major Infrastructure		None
Helicopter Return Flights Per Day		between 1 and 5 per day
Water (daily personal consumption - 200l per day)	l/day	4128
Water (O&M Consumption)	l/day	12960
Electricity (domestic) kVA	kVA	13
Electricity (O&M) kVA	kVA	49

Profile 2 (25% Local Jobs)		
Economic		
Primary School Places (0.27)		2
Secondary School Places (0.2)		1
Educational Bursaries		3
Adult Training / Apprenticeships		5
Additional Healthcare Patients		24
Population Growth		24
Environment		
Major Infrastructure		None
Helicopter Return Flights Per Day		between 1 and 5 per day
Water (daily personal consumption - 200l per day)	l/day	4763
Water (O&M Consumption)	l/day	12960
Electricity (domestic) kVA	kVA	15
Electricity (O&M) kVA	kVA	49

Profile 3 (15% Local Jobs)		
Economic		
Primary School Places (0.27)		2
Secondary School Places (0.2)		1
Educational Bursaries		3
Adult Training / Apprenticeships		4
Additional Healthcare Patients		27
Population Growth		27
Environment		
Major Infrastructure		None
Helicopter Return Flights Per Day		between 1 and 5 per day
Water (daily personal consumption - 200l per day)	l/day	5398
Water (O&M Consumption)	l/day	12960
Electricity (domestic) kVA	kVA	17
Electricity (O&M) kVA	kVA	49

**4.4 Scenario 4 – Motherships**

Profile 1 (35% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		59
% Local	35%	21
% Non Local (relocations)	65%	38
Employees (with families)	30%	12
Employees (without family)	70%	27
<b>Implications</b>		
Socio Economic		
<b>Family</b>		
New Homes Built	40%	5
Existing Homes Restored / Purchased	30%	3
Other + Rented /PT Residents)	30%	3
<b>Single Professional</b>		
New Homes Built	20%	5
Existing Homes Restored / Purchased	30%	8
Other + Rented /PT Residents)	50%	13
<b>Built Development</b>		
Offices	m2	300
Workshops / Support	m2	2500

Profile 2 (25% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		59
% Local	25%	15
% Non Local (relocations)	75%	44
Employees (with families)	30%	13
Employees (without family)	70%	31
<b>Implications</b>		
Socio Economic		
<b>Family</b>		
New Homes Built	40%	5
Existing Homes Restored / Purchased	30%	4
Other + Rented /PT Residents)	30%	4
<b>Single Professional</b>		
New Homes Built	20%	6
Existing Homes Restored / Purchased	30%	9
Other + Rented /PT Residents)	50%	15
<b>Built Development</b>		
Offices	m2	300
Workshops / Support	m2	2500

Profile 3 (15% Local Jobs)		
Economic		
Jobs	Assumption	Estimate
Number Jobs (FTE)		59
% Local	15%	9
% Non Local (relocations)	85%	50
Employees (with families)	30%	15
Employees (without family)	70%	35
<b>Implications</b>		
Socio Economic		
<b>Family</b>		
New Homes Built	40%	6
Existing Homes Restored / Purchased	30%	5
Other + Rented /PT Residents)	30%	5
<b>Single Professional</b>		
New Homes Built	20%	7
Existing Homes Restored / Purchased	30%	11
Other + Rented /PT Residents)	50%	18
<b>Built Development</b>		
Offices	m2	300
Workshops / Support	m2	2500

Profile 1 (35% Local Jobs)		
Economic		
Site (laydown+parking)	m2	2000
<b>Community Infrastructure</b>		
Primary School Places (0.27)		3
Secondary School Places (0.2)		2
Educational Bursaries		3
Adult Training / Apprenticeships		5
Additional Healthcare Patients		49
Population Growth		49
Environment		
Major Infrastructure		New Harbour
Helicopter Return Flights Per Day		1 to 5
Water (daily personal consumption - 200l per day)	l/day	9741
Water (O&M Consumption)	l/day	69120
Electricity (domestic) kVA	kVA	30
Electricity (O&M) kVA	kVA	210

Profile 2 (25% Local Jobs)		
Economic		
Site	m2	2000
<b>Community Infrastructure</b>		
Primary School Places (0.27)		4
Secondary School Places (0.2)		3
Educational Bursaries		3
Adult Training / Apprenticeships		5
Additional Healthcare Patients		56
Population Growth		56
Environment		
Major Infrastructure		New Harbour
Helicopter Return Flights Per Day		1 to 5
Water (daily personal consumption - 200l per day)	l/day	11240
Water (O&M Consumption)	l/day	69120
Electricity (domestic) kVA	kVA	35
Electricity (O&M) kVA	kVA	210

Profile 3 (15% Local Jobs)		
Economic		
Site	m2	2000
<b>Community Infrastructure</b>		
Primary School Places (0.27)		4
Secondary School Places (0.2)		3
Educational Bursaries		3
Adult Training / Apprenticeships		4
Additional Healthcare Patients		64
Population Growth		64
Environment		
Major Infrastructure		New Harbour
Helicopter Return Flights Per Day		1 to 5
Water (daily personal consumption - 200l per day)	l/day	12738
Water (O&M Consumption)	l/day	69120
Electricity (domestic) kVA	kVA	39
Electricity (O&M) kVA	kVA	210