

moray offshore renewables ltd

Developing Wind Energy In The Outer Moray Firth

Environmental Statement

Telford, Stevenson, MacColl Wind Farms
and Associated Transmission Infrastructure

Book Map and Guide



Introduction

The Environmental Statement (ES) is presented in 11 Volumes comprising 5 Sections and supporting Appendices. The structure is described graphically in the following Book Map

Volume 1 is a stand alone Non Technical Summary which gives an overview of the Project and the predicted environmental effects.

Volume 2 contains details of the proposed Project (Section 1) and a Description of the Environment (Section 2). The start of Volume 2 also contains the Preface to the ES which includes a Glossary of Technical Terminology, a List of Acronyms and Abbreviations and Lists of all Plates and Figures which are referred to in the ES.

The Offshore Generating Station Impact Assessment (Section 3) is within Volume 3, the Transmission Infrastructure Impact Assessment (Section 4) is within Volume 4 and the Whole Project and Cumulative Impact Assessments (Section 5) are contained in Volume 5. Blue dividers mark the start of each of these sections. Each of the chapters in Sections 2 to 5 are subdivided into receptors belonging to the Physical Environment, Biological Environment or the Human Environment. Green dividers show where each of these subdivisions start.



The supporting charts, illustrations, and diagrams for Volumes 2 to 5 are referred to as “Figures” and are contained in Volume 6 which is divided into Parts a and b. The Figures are grouped by the individual Environmental Impact Assessment (EIA) disciplines as shown on the Book Map (on the following pages) and are indicated by the green dividers.

Volume 7 contains the Seascape, Landscape and Visual Impact Assessment (SLVIA) figures and photomontages which support the SLVIA chapters in the ES. These figures are divided into four sections: Baseline, Impact Assessment, Onshore Transmission Infrastructure and Cumulative Assessment as indicated by the green dividers.

It is necessary to have Volumes 6 and 7 to hand while reading Volumes 2 to 5. The document has been structured in this way in order to present the narrative and the large A3 graphics in support of each other. This allows the reader to review both simultaneously. Where illustrations and diagrams etc. are embedded within the text, they are referred to as “Plates” and are used where possible to enhance the flow of the narrative.

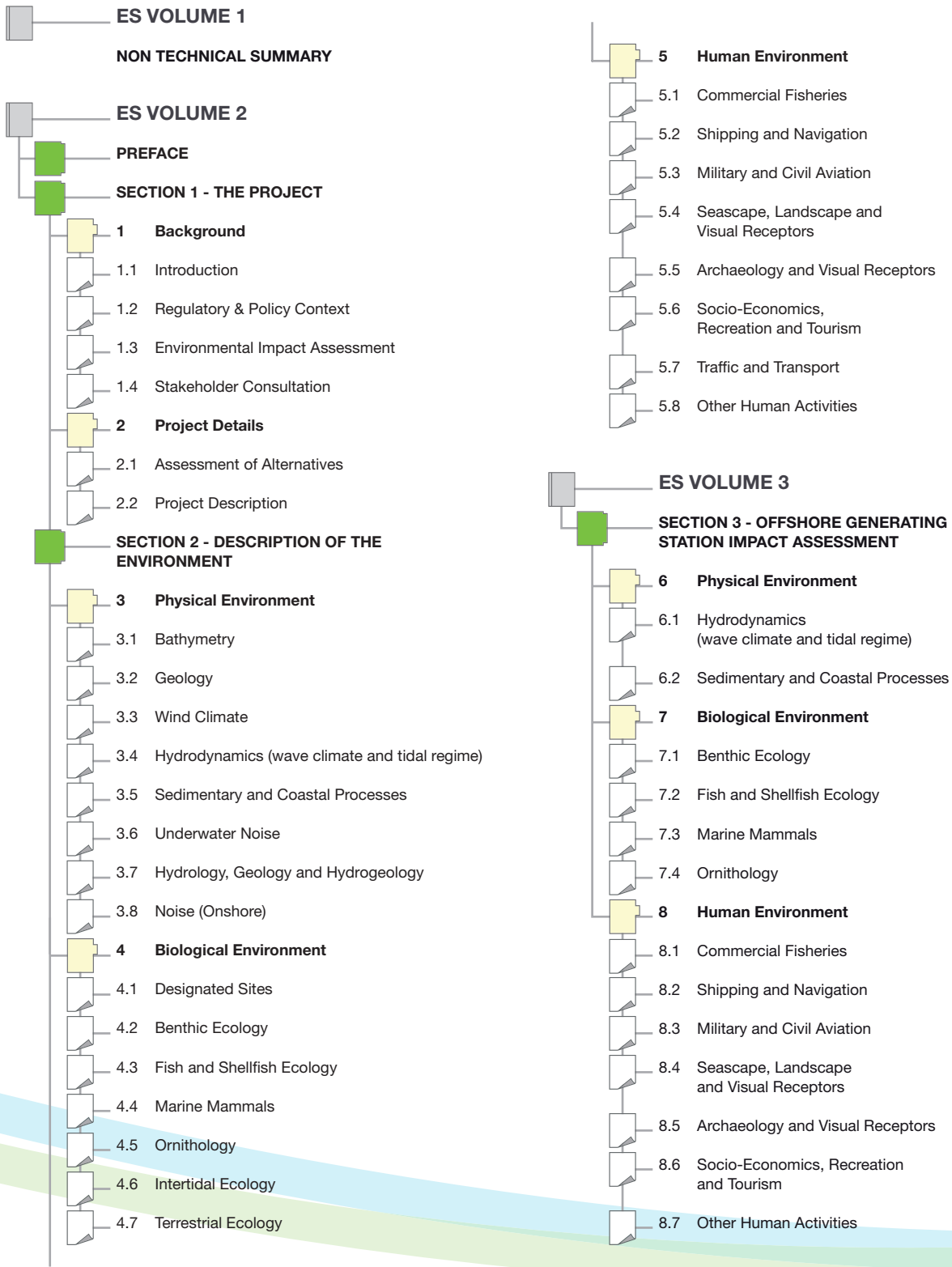
Volumes 8 to 11 contain the Technical Appendices. This includes all of the research, studies, surveys, detailed analysis and data which underpins the ES. Volume 8 contains the Appendices that relate to the Project described in Section 1 of the ES. Volume 9 has the appendices that relate to the Physical Environment, Volume 10 relates to the Biological Environment and Volume 11 contains the appendices relating to the Human Environment. Due to its size, Volume 10 is presented in three parts.

The complete structure is illustrated on the Book Map overleaf which serves as an overall guide to the ES. Each Volume has its own Book Map printed on the inside cover of the binder showing the structure of the content included therein.

The electronic version of the document is presented in the same directory structure as the printed copy in accordance with the Book Map.



Book Map Volumes 1 - 5



ES VOLUME 4

SECTION 4 - TRANSMISSION INFRASTRUCTURE IMPACT ASSESSMENT

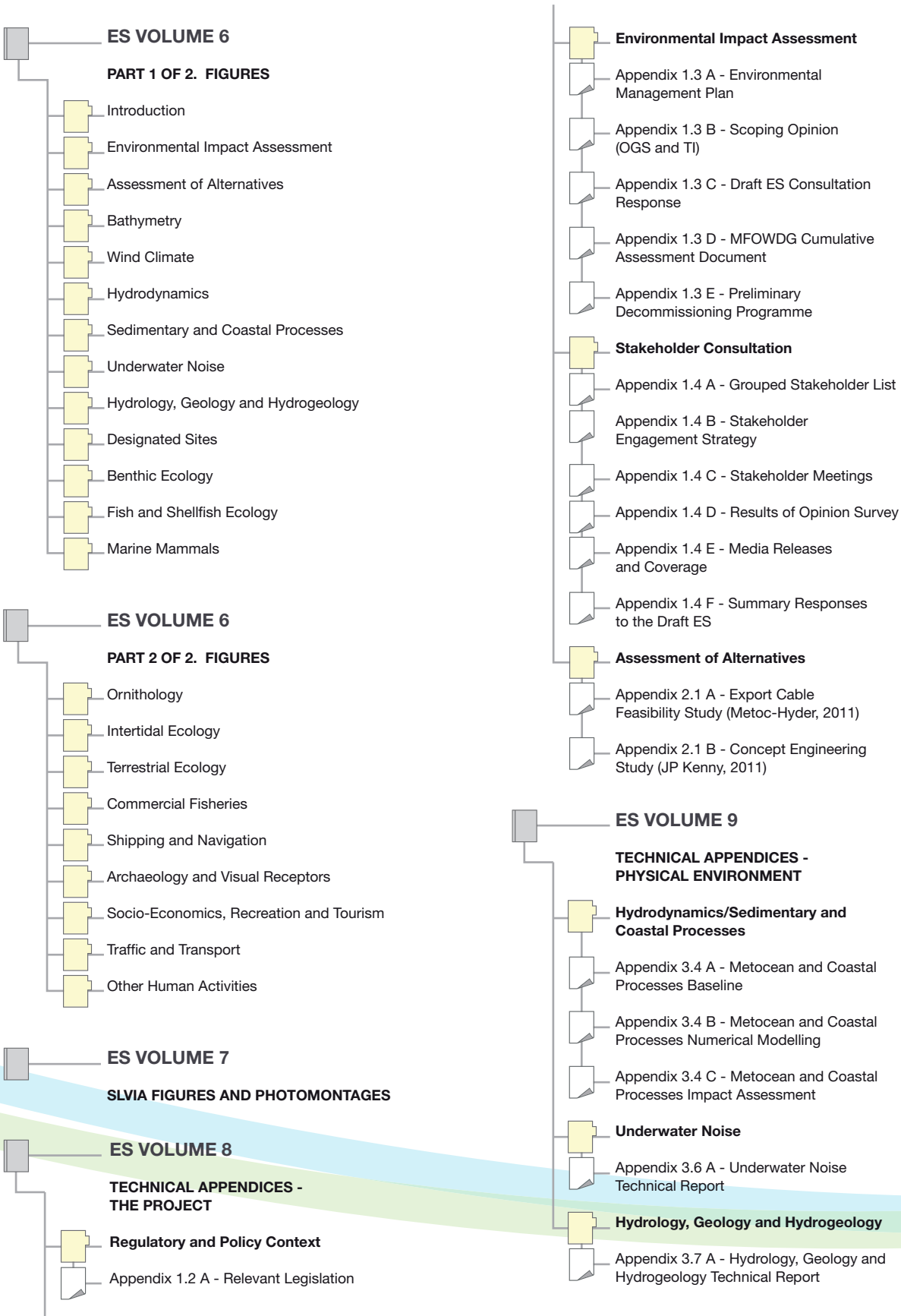
- 9 Physical Environment**
 - 9.1 Hydrodynamics (wave climate and tidal regime)
 - 9.2 Sedimentary and Coastal Processes
 - 9.3 Hydrology, Geology and Hydrogeology
 - 9.4 Noise (Onshore)
- 10 Biological Environment**
 - 10.1 Benthic Ecology
 - 10.2 Fish and Shellfish Ecology
 - 10.3 Marine Mammals
 - 10.4 Ornithology
 - 10.5 Intertidal Ecology
 - 10.6 Terrestrial Ecology
- 11 Human Environment**
 - 11.1 Commercial Fisheries
 - 11.2 Shipping and Navigation
 - 11.3 Military and Civil Aviation
 - 11.4 Seascape, Landscape and Visual Receptors
 - 11.5 Archaeology and Visual Receptors
 - 11.6 Socio-Economics, Recreation and Tourism
 - 11.7 Traffic and Transport
 - 11.8 Other Human Activities

ES VOLUME 5

SECTION 5 - WHOLE PROJECT IMPACT ASSESSMENT

- 12 Whole Project Assessment**
 - 12.1 Whole Project Assessment
 - 12.2 Habitat Regulations Appraisal Summary
- SECTION 6 - CUMULATIVE IMPACT ASSESSMENT**
- 13 Physical Environment**
 - 13.1 Hydrodynamics (wave climate and tidal regime)
 - 13.2 Sedimentary and Coastal Processes
 - 13.3 Hydrology, Geology and Hydrogeology
 - 13.4 Noise (Onshore)
- 14 Biological Environment**
 - 14.1 Benthic Ecology
 - 14.2 Fish and Shellfish Ecology
 - 14.3 Marine Mammals
 - 14.4 Ornithology
 - 14.5 Intertidal Ecology
 - 14.6 Terrestrial Ecology
- 15 Human Environment**
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 - 15.4 Seascape, Landscape and Visual Receptors
 - 15.5 Archaeology and Visual Receptors
 - 15.6 Socio-Economics, Recreation and Tourism
 - 15.7 Traffic and Transport
 - 15.8 Other Human Activities

Book Map Volumes 6 - 11



ES VOLUME 10

PART 1 OF 3. TECHNICAL APPENDICES - BIOLOGICAL ENVIRONMENT

- Benthic Ecology**
 - Appendix 4.2 A - Benthic Ecology Characterisation Survey (Wind Farm Sites)
 - Appendix 4.2 B - Benthic Ecology Characterisation Survey (Transmission Infrastructure)
- Fish and Shellfish Ecology**
 - Appendix 4.3 A - Fish and Shellfish Ecology Technical Report
 - Appendix 4.3 B - Salmon, Sea Trout and Fisheries Technical Report
 - Appendix 4.3 C - Sandeel Survey Report
 - Appendix 4.3 D - Electromagnetic Fields Modelling

ES VOLUME 10

PART 2 OF 3. TECHNICAL APPENDICES - BIOLOGICAL ENVIRONMENT

- Marine Mammals**
 - Appendix 4.4 A - Marine Mammals Baseline
 - Appendix 7.3 A - Marine Mammals Environmental Impact Assessment
 - Appendix 7.3 B - Framework for assessing the impacts of pile-driving noise from offshore wind farm construction on Moray Firth harbour seal populations
 - Appendix 7.3 C - MORL SAFESIMM noise impact assessment for seals and cetaceans
 - Appendix 7.3 D - A comparison of behavioural responses by harbour porpoises and bottlenose dolphins to noise: Implications for wind farm risk assessments
 - Appendix 7.3 E - Identification of appropriate noise exposure criteria for assessing auditory injury for Pinnipeds using offshore wind farm sites.
 - Appendix 7.3 F - Noise propagation and SAFESIMM model outputs for marine mammal risk assessment
 - Appendix 7.3 G - Habitat Regulations Appraisal: Marine Mammals
 - Appendix 7.3 H - EPS Assessment: Supplementary Information

ES VOLUME 10

PART 3 OF 3. TECHNICAL APPENDICES - BIOLOGICAL ENVIRONMENT

- Ornithology**
 - Appendix 4.5 A - Ornithology Baseline and Impact Assessment
 - Appendix 4.5 B - Aerial Ornithology Surveys for the Moray Firth Zone, Summer 2011
 - Appendix 4.5 C - Seabird Tracking and Modelling Report

- Intertidal Ecology**
 - Appendix 4.6 A - Intertidal Benthic Ecological Characterisation Survey
- Terrestrial Ecology**
 - Appendix 4.7 A - Terrestrial Ecology Technical Report

ES VOLUME 11

TECHNICAL APPENDICES - HUMAN ENVIRONMENT

- Commercial Fisheries**
 - Appendix 5.1 A - Commercial Fisheries Technical Report
- Shipping and Navigation**
 - Appendix 5.2 A - Hazard Log
 - Appendix 5.2 B - Consequences Assessment
 - Appendix 5.2 C - MCA MGN 371 Checklist
 - Appendix 5.2 D - Navigational Risk Assessment (Wind Farm Sites)
 - Appendix 5.2 E - Navigational Risk Assessment (OfTI)
- Military and Civil Aviation**
 - Appendix 5.3 A - Initial Aviation Assessment
 - Appendix 5.3 B - Helicopter Impact Assessment
 - Appendix 5.3 C - Radar Propagation Modelling
- Seascape, Landscape and Visual Receptors**
 - Appendix 5.4 A - SLVIA Methodology
 - Appendix 5.4 B - Met Office Meteorological Data
 - Appendix 5.4 C - SLVIA Secondary Assessments
- Archaeology and Visual Receptors**
 - Appendix 5.5 A - Archaeology Technical Report
- Socio-Economics, Recreation and Tourism**
 - Appendix 5.6 A - Socio-economic Technical Report
- Traffic and Transport**
 - Appendix 5.7A - Consultee Responses
 - Appendix 5.7B - Traffic Flow Data
 - Appendix 5.7C - Future Traffic Baseline
- Other Human Activities**
 - Appendix 5.8 A - UXO Threat and Risk Assessment

CONFIDENTIAL APPENDIX

- Appendix 4.7B - Terrestrial Ecology

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