ICIT : study opportunities in Orkney
presentation for Floro Marine Energy / Hydrogen Conference Sept 2017

Dr Sandy Kerr
Director ICIT
An International University

- 1821 world’s first Mechanics Institute,
- 1966 Royal Charter
- 1,737 staff, 6 academic schools
- 10,000 students in Scotland
- 31,000 students globally

- 5 Campuses
- Edinburgh; Scottish Borders and Orkney
- Dubai, 4,000 students
- Putrajaya in Malaysia 1,000
ICIT Background

- In Orkney Since 1989
- Multidisciplinary Team
  - Engineering
  - Ecology
  - Economics
- School of Environment Geoscience Infrastructure and Society (EGIS)
Tidal current resource

- Up to 6m/s
- Over ¼ European resource in Pentland Firth
- World’s first commercial tidal array Meygen
  - 86MW
  - 396MW
Wave resource

- Exposed to westerly winds
- Average wave 2-3m
- Extremes much greater
Atlantic Storms

- January 2016
- 170kmph

5 February 2013
Our Research

Compliance and consenting

Environment

Technology

Stakeholders

Other activities

Real Seas

Our Research
24 hrs of predicted depth-averaged current speed through Goto Islands at springs tides
Measurement & Monitoring
Dr Rob Harris, Dr David Woolf

HF Radar – surface currents

ADCP - turbulence
Environmental monitoring
Prof Jon Side, Dr Jo Porter, Dr Mike Bell

- Potential effects of marine energy
- Climate change
- Biofouling
- Noise
Understanding Biofouling
Dr Jo Porter, Dr Mike Bell

- Project with EMEC
- Understand biofouling that occurs
- What are the engineering impacts?
- What about different parts of the world?

www.hw.ac.uk/about/news/marine-biofouling-study.htm
Managing our Seas
Dr Sandy Kerr Dr Kate Johnson

- Marine Spatial Planning
- Community and Economic Benefits
- Governance and Ownership
INTERNATIONAL RESEARCH LINKS

Countries we have visited (green) and those that have visited us (yellow)
Postgraduate Teaching

- MSc Renewable Energy Development
- MSc Marine Renewable Energy
- MSc Marine Resource Management
- MSc Marine Spatial Planning

Environment
- resource
- environmental impact
- global warming

Technology
- generation
- transmission
- storage
- monitoring

Policy Economics
- strategy
- planning
- financial viability
- pricing

Scotrenewables
Tidal Power Ltd
Stromness
‘Business Cluster’

- EMEC
- ICIT Heriot-Watt
- Aquatera Ltd
- Xodus Ltd
- Green Marine
- Scotrenewables
- OREF
OUR STUDENTS
Countries of origin for our On-campus (blue) and Distance Learning (red) students

25 on campus
100 IDL
STUDENT FEEDBACK

- 100% “excellent” or “good” rating of their MSc programme
- 96% say lecturers are enthusiastic and supportive
- 94% would recommend their course
- 94% say ICIT has a good, strong relationship with the industry
- 60% of students in related jobs one month after graduation (2013-15 feedback)

STUDENT QUOTES

“I would definitely recommend Orkney to other students. It is a great place to live and to study, and was definitely the best decision I have made!”

“It was far better than I could have imagined!”

“We became part of the renewable world from island touchdown.”

“Great course, great people, great place.”

“I met so many great people and had such a good time that I can easily say it is the best choice I could have made.”
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