

HYDROPOWER

Development in the United Kingdom



Introduction

David Williams – BHA

Hydro development in UK – size & scope

Charles Crewdson – Gilkes

The challenge for equipment suppliers

Kieron Hanson – Hydroplan

Changes in the consultants role



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All Energy, Aberdeen

21 May 2009

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Present situation

SCOPE

- **Pumped Storage**
- **Storage hydro**
- **Run of river hydro**
- **Micro hydro**
- **Energy recovery from water supply and water treatment**
- **Refurbishment/replacement and upgrade of old plant**
- **Tidal impoundment (including the Severn Tidal Project)**
- **Tidal stream**

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Present situation

CAPACITY

- Conventional hydro – 1.5GW
- Pumped storage – 2.8GW
- Tidal impoundment & Tidal stream – 0GW

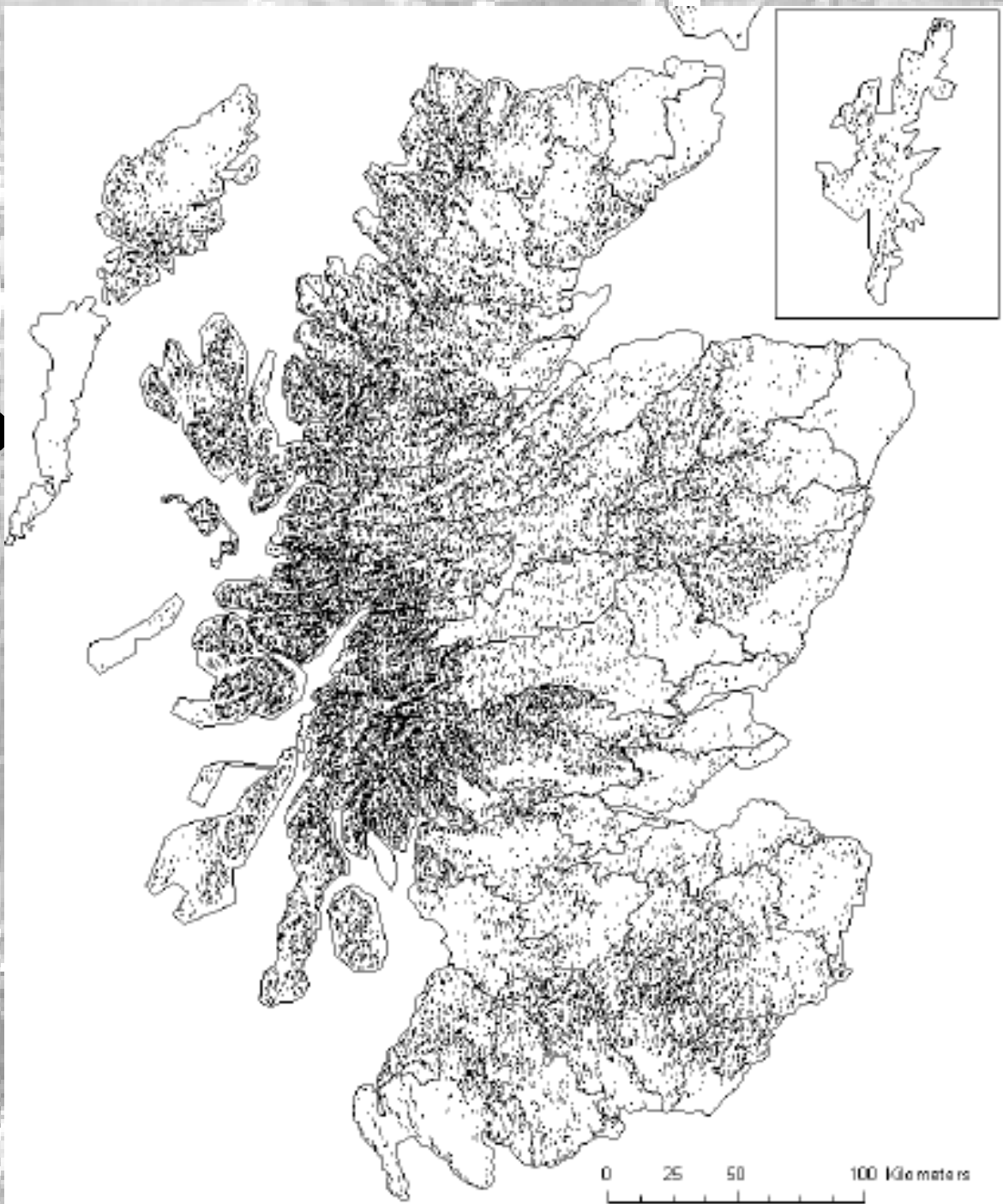
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Potential

•Pumped Storage -	?
•Conventional Hydro	
Scotland	657MW (min)
England & Wales	250MW
N Ireland	~ 10MW
•Water supply and water treatment	~ 40MW
•Tidal energy (excluding the Severn Tidal Project)	~ 10GW
•Severn Tidal Project	~ 5GW
TOTAL	~ 16GW



HYDRO POTENTIAL

Group

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DEVELOPMENT OF SCOTTISH HYDRO POTENTIAL HYDRO RESOURCE STUDY

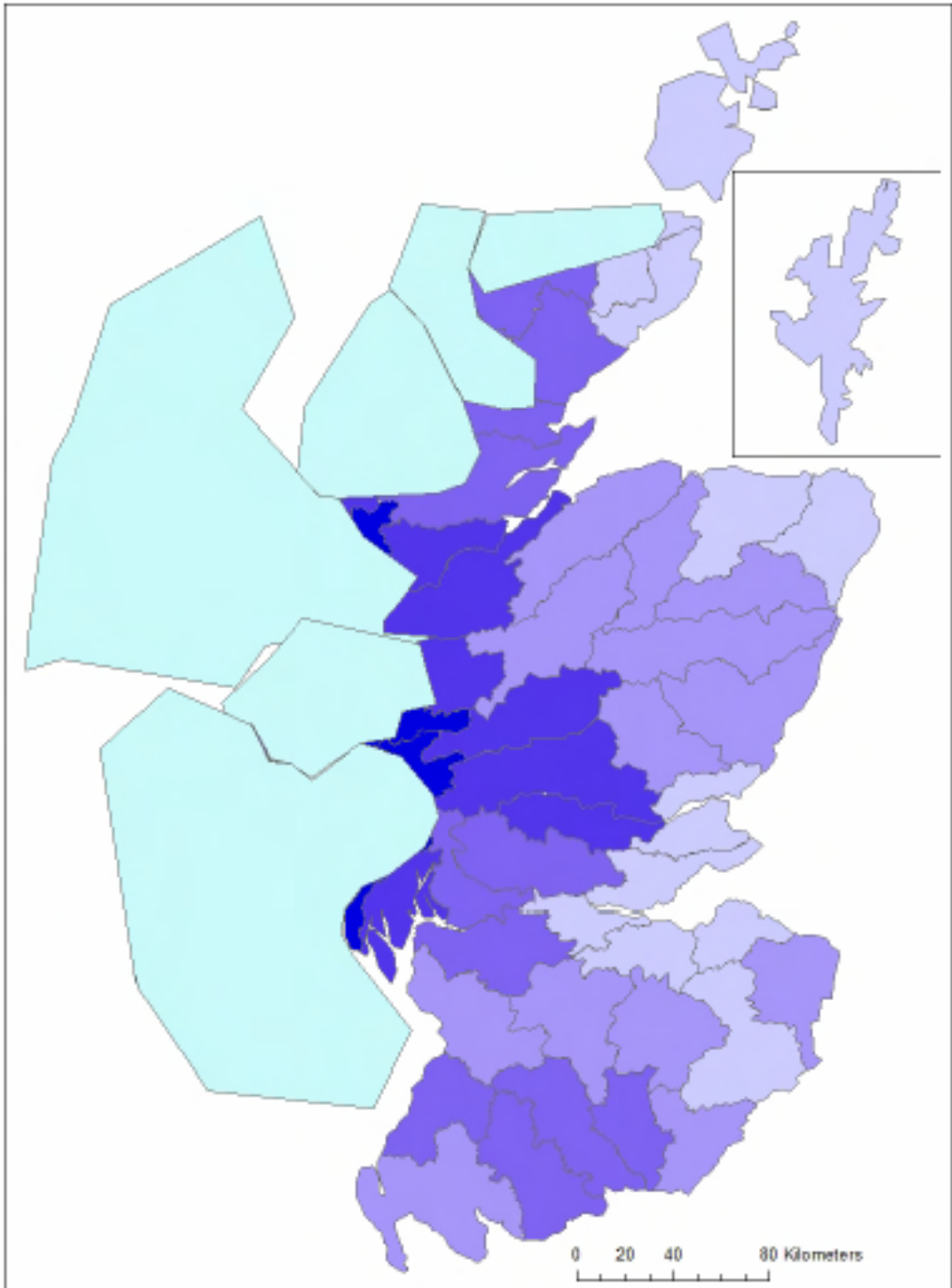
Key issues:

- **Economics**
 - Value of ROCs
 - Impact on smaller hydro projects
- **Consenting and regulatory issues**
 - Section 36 Threshold
 - CAR Applications



HYDRO POTENTIAL

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WHAT HAPPENS NEXT?

How do we approach the barriers?

What government support is needed?

Can we cope with the expansion?

Will the recession stop or impede progress?