Developing the Green Energy Skills Sector

David McKay
Head of Transmission Operations
SSE
The Investment required is huge

- 1950s/60s - Power from the Glens
- Spend was equivalent of £300M/yr
- Over last 10 years 1.7GW of wind capacity
- Investment now around 5 times greater
- Ernst and Young report investment by energy utility sector of £43bn in last 4 years
- UK Govt estimate further £110bn by 2020
Renewable Projects

• In Scotland – 2GW in planning & further 7GW potential

• Not just wind
  • Hydro
  • Marine – tidal and wave
  • Biomass and biogas
  • Heat Pumps
  • Solar

• Potential for at least £2bn in Highlands and Moray alone.
The next 10 years will be about growing our network to accommodate renewables

1. Beauly-Denny rebuild
2. Knocknagael substation
3. Beauly-Kintore 275kV reconductor
4. Beauly-Dounreay 2nd circuit
5. East Coast 400kV reconductor
6. Western Isles Link (HVDC)
7. Caithness-Moray-Shetland & Hub
8. Kintyre-Hunterston subsea link
9. Orkney reinforcement
10. East Coast HVDC Link
11. Inverarnan

Plus other local reinforcements
Other projects are many and varied

- Smart Metering
- Smart Grids
- Energy Efficiency
- Low carbon transport
- Smaller scale and community energy
Local Employment

- 2000 staff and contractors in Highlands and Moray
- Commitment to use local contractors and services where possible and available - Highland Portal created
- Macrahanish
- Beauly – Denny – 500,000 bed nights!
- Examining tender offer commitment to employ people from the local community that have been trained from local colleges
- New development = new jobs
- Committed to giving local people jobs
Overview of skills issues

- Energy sector as a whole reporting skills shortages
- Around 50,000 technically skilled staff who operate and maintain power stations and networks
- Up to 46% of engineering and technical staff set to retire over the next 10-15 years
- Can be long lead times
- A lack of potential engineers / skilled craftsman coming through from schools / Universities
- Skills needed are many and varied
  - Ground works
  - Electricians
  - Project managers
  - System engineers
  - Technicians
• Recruited over 800 people into these programmes.
• Invested £65 million pounds in our pipelines since 2007.
SSE – What are we doing?

• Partnership with UHI and other HE / FE institutions

• Engaging with schools – BtE

• Active involvement in STEM network

• Engaged with curriculum for excellence to produce feeder qualifications for jobs in customer service and engineering apprenticeships

• Working with Barnardos to support those in most challenging circumstances

• Working with the supply chain
SSE employment of 16 – 24 year olds

- SSE 1370, 69%
- SEC 590, 30%
- Renewables 32, 1%
Questions?