Action List

The following is a draft list of actions to overcome the 6 barriers identified by the stoRE partners for Ireland. The action list is a compilation of actions suggested during the stakeholder consultation and the actions discussed during the workshop.

Actions for countering a lack of investment motivations & incentives

1. Demonstration model
    a. Pseudo market to show the benefits of storage in regard to the impact of different levels of wind generation on pumping/generating of storage ("live" without constraining power plants and/or in for example PLEXOS) → show the benefits of storage (with and without) on electricity market.
    b. Model the impact, using for example Ardnacrusha, of storing water behind dams at different water levels → benchmark
2. Investigate (study) the impact of Turlough hill being out of commission and the level of curtailment
3. Capfit & Refit scheme for storage?
   Need to know what question we are trying to answer if we are to go down the route of capfit and refit.
   Investors need certainty (25 + years).
   Banks have problems with perceived and real construction risks.
4. To look at Ireland as part of a bigger region (with the UK)
   Perhaps it is better to see Scotland as the right place for storage and Ireland for wind resources.
5. Need for different entry route into market for new technologies;
   ➔ difficult for new technologies to enter market under same route as conventional technologies;
   ➔ need a strategic view for 2030+ market;
   ➔ new market to be unveiled in 2017;
   ➔ The new market needs to accommodate whatever investments are being made now (which is not the case currently);
   ➔ Ensure framework is in place now for 2017 without constraining investments (Country cannot be in standstill mode until the new market is in place).
6. Create funding and incentives to develop the most efficient storage solutions.
7. Cost comparison : a comprehensive study investigating a holistic view of energy storage in Ireland (cost benefits including economic, environmental, security of supply, flexibility, possible support mechanisms (DCENR/SEAI-short term) – on a 5 year basis?
8. Market and ancillary services should reward/encourage cheap energy storage (by Regulator/TSO).
9. Clarity around investment environment and returns.

Actions for countering a lack of definitive storage needs

1. Investigate all types of storage and its applications and determine the future energy system. The future energy system will determine the type of storage and other technologies needed. Even if the investments are guaranteed the rest of the energy system may change.
2. Identify the need for storage clearly set out for different scenarios (by utilities)
3. National requirements should be assessed and run in parallel with renewable energy targets (by DCENR) – long term.
4. Include target for energy storage for 2020 and associated incentives for developers (by DCNER) – medium term.
5. Demonstration storage project?
6. Further the investigation of initial energy storage needs for Ireland with further detail to establish definitive energy storage need (by EU stoRE project).
7. Predictable future market and penetration of intermittent renewable forecast to enable a solid business case (by Policy makers – EU/National/Regulators).

Actions on countering competition with other technologies

1. Energy Storage needs to be on the EirGrid DS3 agenda (short term)
2. Storage needs to be investigated from a technical perspective as comparison with other options (short term).
3. Question ERC/ESBN policy of GRID strength only.

Actions for countering strong interdependence between energy storage & system development

1. Site selection for storage needs to consider grid constraints and power quality (currently wind is in the west and storage is in the east – if storage is closer to variable renewable energy there will be less transmission constraints).
2. Appropriate framework needs to be set to ensure future development of the wind industry in Ireland (by government)
3. Cooperation required between energy companies, utilities, regulators and the government.
4. Foresight required for the future needs of the country incorporating possibly “vote losing” strategies which will be beneficial in the long term.

Actions for countering double or uncertain grid access fees

1. Investigate best practise in managing access fees.
   For example, in Texas storage facilities do not pay any grid access fees because they recognise the services provided to the grid.
2. Study grid access fees issue – investigate best practise and consult in order to come to clear policy (by EirGrid – Long term).
3. Investigate natural gas storage → a new entrant is lobbying for gas storage to be exempt from access fees.

Actions for siting and planning constraints

1. Conduct Strategic Environmental Assessment (SEA) → The size and scale means that storage facilities should be considered strategic.

2. Create national guidelines or guidance in relation to energy storage schemes (by DECLG) – short term.
3. Clear policy stipulating the overriding public importance of bulk EST based on reduction of current dependency on fossil fuels → allow for siting in suitable areas which may support Natura 2000 designations subject to Article VI Stage 3 & 4 assessments.

Other Actions

1. Need for round table discussion, which includes all stakeholders and interest groups in storage (including CER and government).
2. CER needs to become more proactive– currently very conservative.
3. Statistical transfers (of RES credits) → if RES-E that would otherwise be curtailed could be stored then the energy could count towards the RES-E target if it is statistically transferred to the storage facility. The storage unit could even be in another country.
4. Government is focused on 2020, necessity to model 2030 + scenarios.
5. Long term energy system planning is necessary (need to change from current energy system to a RES centred energy system).