Small Scale Hydro Projects

Key considerations
A small scale hydro project needs to consider many of the same “building blocks” as a much larger scheme.

**Key considerations**

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<td><strong>01</strong></td>
<td>Land Acquisition/Lease: Including full water catchment area protection. No ransom strip?</td>
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<td><strong>02</strong></td>
<td>Planning and Environmental Consents - including windows of permitted working</td>
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<td><strong>03</strong></td>
<td>Robust and “bankable” hydrology reports and site data</td>
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<td><strong>04</strong></td>
<td>Sources of Finance: Security and due diligence requirements (Bank, equity investor/sub-debt, grant funding, community bond issue etc.)</td>
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<td><strong>05</strong></td>
<td>Grid offer &amp; timeline for connection</td>
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<td>Contract Procurement and negotiation: Multi-contract v “turn-key” structure</td>
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<td>What are the risks and who is best placed to manage?</td>
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<td>Reliance of middleman v turbine manufacturer delivery slots; suitability, warranty protection and covenant</td>
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<td>Route to Market: Selling the product and maximising income (FIT only or FIT with Export PPA)</td>
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<td>O &amp; M requirements and options</td>
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<td>Long Term Strategy: Develop &amp; sell/ develop and “hold”?</td>
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<td>One off project v “portfolio” of smaller scale</td>
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For small scale a greater consideration of the key risks and mitigants is fundamental at the outset, as the “value impact” of an unbudgeted or small cost or risk arising may have a materially adverse effect.
Indicative structure

- **Bank**
- **Equity**
- **Grant funding**
- **FIT/Power Purchaser/ROC**

**Developer/Land owner**

- **“Exit” Route**
  - Sale
  - Wealth planning
  - Long term investment

- **Land/Planning consents/Water catchment area licences**
- **Electrical (Grid/site)**
- **Turbine/Hydro electric equipment**
- ** Civils and pipe supply**
- **Operation & maintenance**
What is your role/entry point to the market?

**Land owner**
- Lease to project co (rent)
- Sell consented and developable (capital gains)
- Develop and hold
- Tax and wealth planning

**Developer**
- Acquire/sell consented and developable
- Develop and sell post construction
- Develop and hold (O&M portfolio)
- Purchaser of operational sites

**Investor/Funder**
- Equity
- Bank debt
- Construction finance
- Pre consent
- Consented and developable finance
- Acquisition
- Targets
- Owners
- Developers
- Project portfolio
- Project finance
- Secured finance (e.g. secured over farm estate)
- Re-finance

**Community Group**
- Establish project vehicle and develop project
- Bank debt with grant funding
- Community bond issue
- Equity share in commercial project
- Revenue share in commercial project
- Not for profit or “capped return” project vehicle
- Protect the community
- Flexible for long-term
- Tax efficient

- Critical success factors (“CSF”)? Will be different for:
  - Landowner/ on-site energy user
  - Portfolio developer
  - Funder/investor
  - Community group
- Commercial Parameters are driven by CSF, structure and timetable

- Enter into commercial partnership?
- Recognise small scale bargaining position and due diligence requirement for your investors/bank/exit route
- What funding can you commit at (a) development/consenting stage and (b) procurement and construction stage? Will gap funding be required at any point?
- If more than one project, leverage development pipeline/portfolio approach with supply chain, investors and replicate work on first project across development pipeline
Why Shepherd and Wedderburn

We recognise that small scale hydro projects require a different approach to legal scoping, methodologies and cost v. value, including innovative payment options such as the possibility of agreement of a fixed fee for standard “one stop” package and for “buy now” pay later options where appropriate for the particular project.

Small-scale v. medium / large scale

**Similar**
- Consent, licence, grid requirements and other underlying project needs
- Requirements for equity/investors to ensure projected returns
- Bank security package and due diligence will not differ materially regardless of size of lend, unless landowner secures his land which may not be attractive

**Different**
- Scale of environmental concerns materially different
- Lower capex and shorter build phase
- Impact in % terms of a £50k ‘overrun/hit’ if project or contracts are not robust so risk if cutting corners to reduce costs/increase returns is high
- Potential ‘drag’ on project economics if material legal costs for similar services

Our recent experience

We have extensive experience in hydro projects, small scale and larger scale hydro-dams and pumped hydro storage from new build to operation and refurbishment.

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<th>Real Estate and agriculture</th>
<th>Corporate/entities</th>
<th>Private wealth</th>
<th>Charities and communities</th>
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<tbody>
<tr>
<td>Assisting land owners and developers in securing “bankable” options and leases including all necessary rights to protect catchment area and dealing with crofting issues.</td>
<td>Advising on structures to develop, own and realise small scale projects whether based on tax incentive schemes, limited partnerships or single purpose vehicles and whether tailored to suit landowner interest, joint ventures, tax planning or exit strategy drivers.</td>
<td>Regionally advising landowners on their options to secure, protect or enhance their assets or income streams relative to the structure for a development. We have advised on involvement in a development whether simply as landowner or with a stake in the developer but also in terms of wealth, protection and investment with regard to proceeds from operation or exit.</td>
<td>Advising on numerous charity and community related schemes including securing charitable status, compliance with the key regulatory requirements, establishing charity and community entities and advice in connection with securing a member’s bond for refinancing of an asset backed project.</td>
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<th>Financing</th>
<th>Planning and consenting</th>
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<td>Advice in securing robust appointments of consultants from feasibility, design and implementation as well as key contracts to be placed for civil and structural works, processed plant and mechanical and electrical infrastructure. Advising in connection with grid connection including any contestable options and assisting with operation and maintenance contracts whether during warranty or post-warranty period.</td>
<td>In connection with green incentives, project finance, asset and other forms of secured financing and construction finance models, providing advice in order to assist developers not funding from cash reserves.</td>
<td>The full range of critical consent consulting whether in relation to planning, Controlled Activity Regulations, environmental and backed assessment reviews, advising on conditions, local planning authority agreements and reinstatement bonds, covering the breadth of planning and environmental issues.</td>
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