Community Renewable Energy Projects

The Social Financer's View

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1 Introduction

Charity Bank

- **Fully regulated, non-profit bank**
- **Lends ethical savers' money exclusively to social enterprises and charities for a fair rate of return**
- **Low default rate due to careful risk analysis in sector**
- **Idea today is to illuminate the bank's decision-making criteria for investing in micro-hydro schemes**

2 Charity Bank and Hydro: Context

- **A look at the bank's credit risk analysis of 11 hydro schemes it has dealt with 2009-2014 in Great Britain**
- **Schemes ranged from 44kw Archimedes Screw to 400kw Run of River projects, including Kaplan Turbine projects**
- **All data is aggregated and anonymised**
- **Comparison of risk 'assumed' by bank versus risks actually realised by our Hydro borrowers**
- **Bank's key issues are:**
  - **Evidenced Social Impact**
  - **Ability to service debt**

3 Hydro Schemes' Sources of Finance

	Charity Bank Loan	Public Sector Loan	Community Member Loans	Public Sector Grant	Carbon Fund Grant	Feasibility/Dev. Phase Grant	Community Donations	Community Share Issue
1	x					x		x
2	x			x				x
3	x					x		x
4	x				x			x
5	x			x				
6	x				x		x	
7	x							x
8	x	x						x
9	x		x		x	x		
10	x			x			x	x
11	x	x					x	

4 Bank's Pre Project Risk Assumptions

Influences on risk assumptions

- The 5 Cs
- Analysts focus on risks until the end of the loan term
- The risks identified by unconnected credit analysts on unconnected hydro schemes had a lot of commonality

4 Bank's Pre Project Risk Assumptions

Cost over-runs to comply with new or omitted statutory obligations

Cost over-runs: non-specific

Funding issues

Governance

Lower than forecast rainfall or water levels

Sales underperformance

Technical and engineering teething problems

5 Borrowers' risks actually realised

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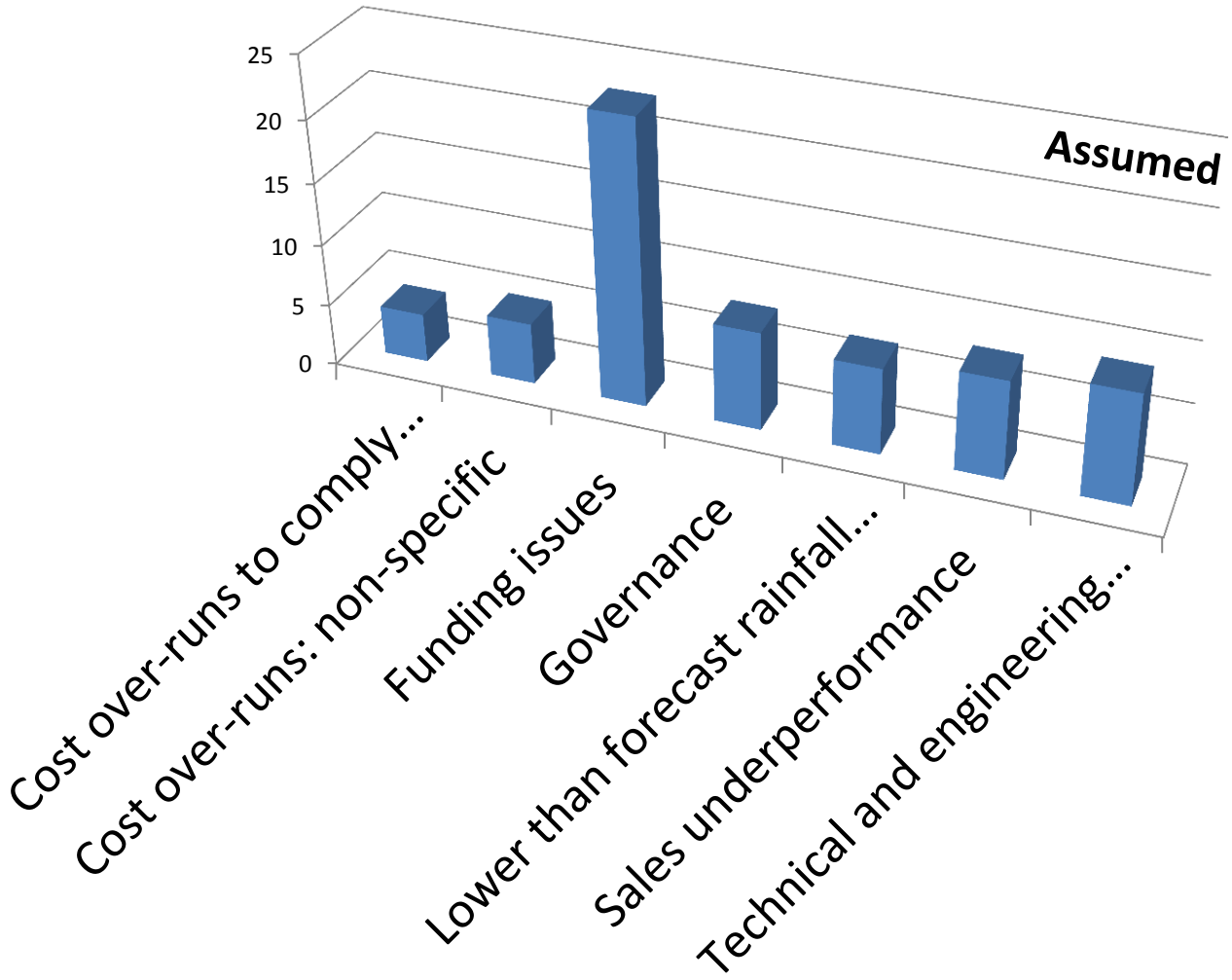
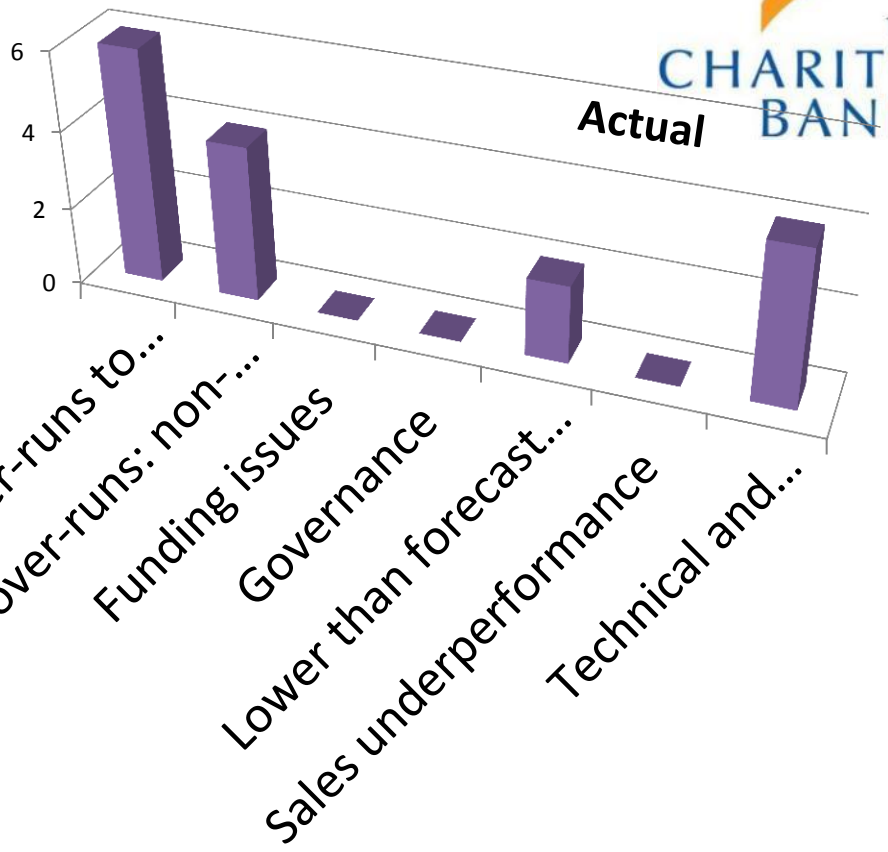
5 Borrowers' risks actually realised



5 Borrowers' risks actually realised



6 Conclusions

- **Risks to sustainability for a hydro scheme are related to uniqueness of each scheme**
  - **Compliance with environmental requirements can be sorted quickly by good stakeholder management, with officialdom, and with locals – even anglers**
  - **Each scheme's unique capacity and geology means there's no one-size-fits-all fool-proof technology – each one needs a bedding in period – build in contingency to your budget for the unforeseen**
  - **Admit to yourself and your project team that the success depends on rainfall. Projects are consistently over-optimistic about the weather**
  - **Technical and engineering problems: pay special attention to who bears the risk of losses in any contract you sign**

- **The trick to getting investors to trust the scheme is not to show that you have all the answers, but that you at least have all the right questions**

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