



*Empowering Communities*

**Borders  
Energy  
Agency  
2018**

# the Cobble Cauld Project

**Andy Maybury MA**  
consultant engineer

# Community Energy Scotland

*strong*



*well informed*

*capable*



# Community Energy Scotland



localised



democratic

sustainable

# Community Energy Scotland

*understanding*

*ownership*



*collaborate*



# Cobble Cauld Project

## HCEGL

Hawick Community  
Energy Group

Clean electricity  
Owned by the community  
Local investments

Power  
the high  
school

Archimedes screw

Gobble pool



**MANNPOWER**  
CONSULTING LIMITED

fish pass



Reconnecting our heritage

2017



# Cobble Cauld Project



## Feasibility Study of a hydropower scheme using an Archimedean Screw Turbine at Hawick

Project Number 345

Client: Hawick Community Council

27<sup>th</sup> January 2017

Conducted by Adrian Clayton

MannPower Consulting Ltd.  
Barton Cottage  
York Road  
MALTON  
YO17 6AU  
01853 619968

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England Registration No. 5014920 VAT No. 81835519



# Cobble Cauld Project





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## Hawick Flood Protection Scheme

*Prepared for*  
Scottish Borders  
Council

March 2017

**ch2m**





# Cobble Cauld Project





# Cobble Cauld Project



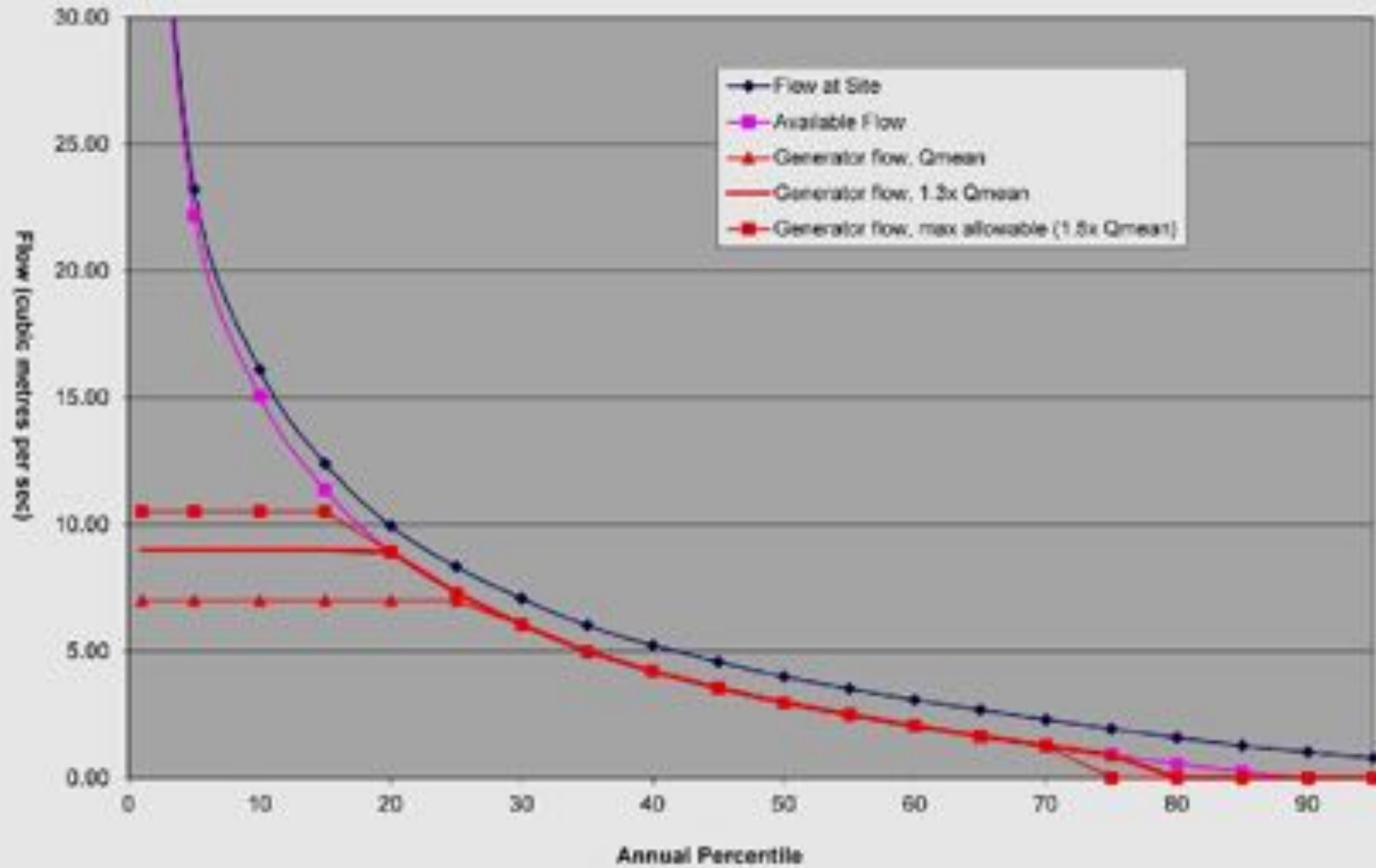


# Cobble Cauld Project



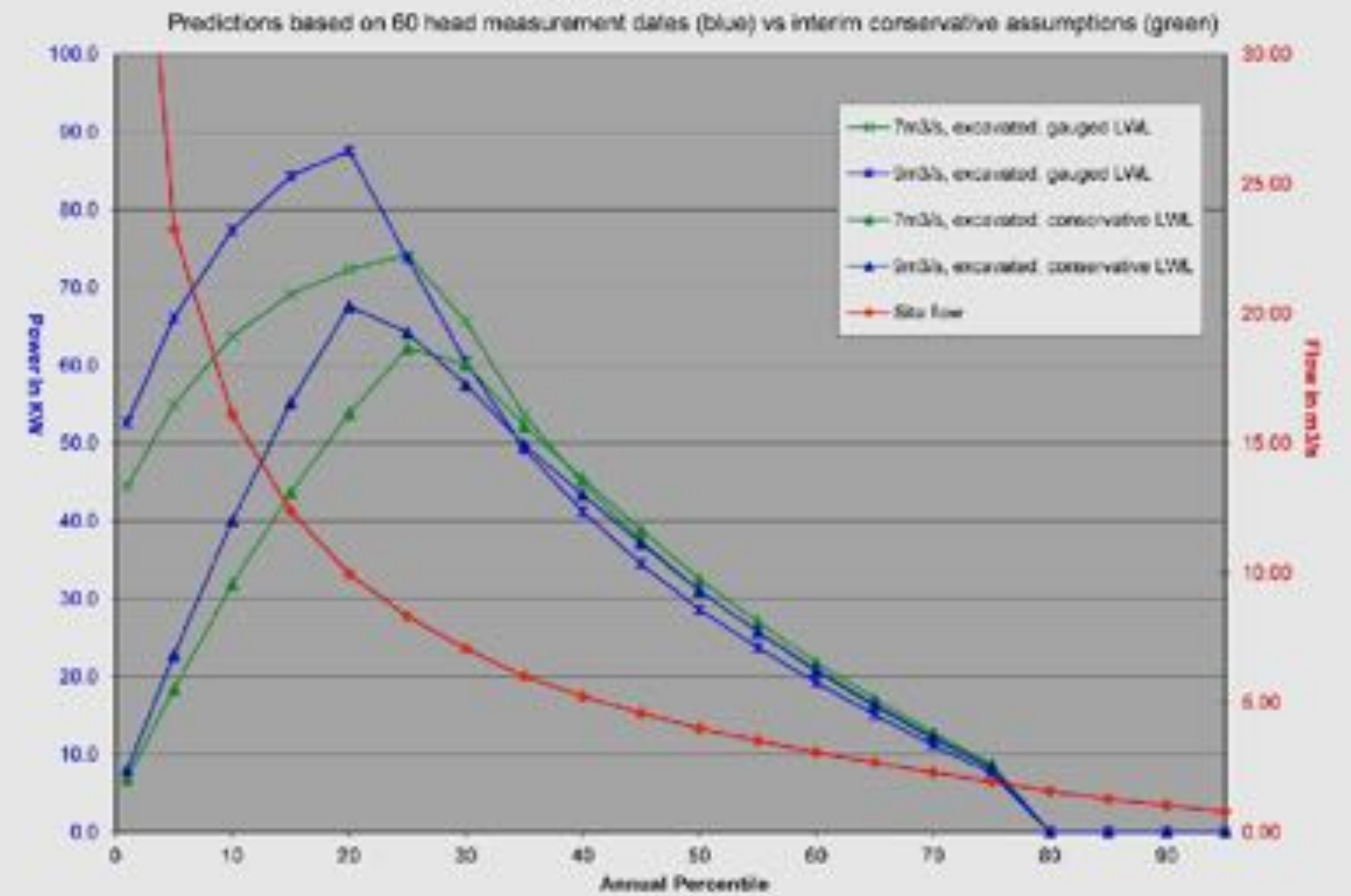
Hawick  
345

### Flow Duration Curve



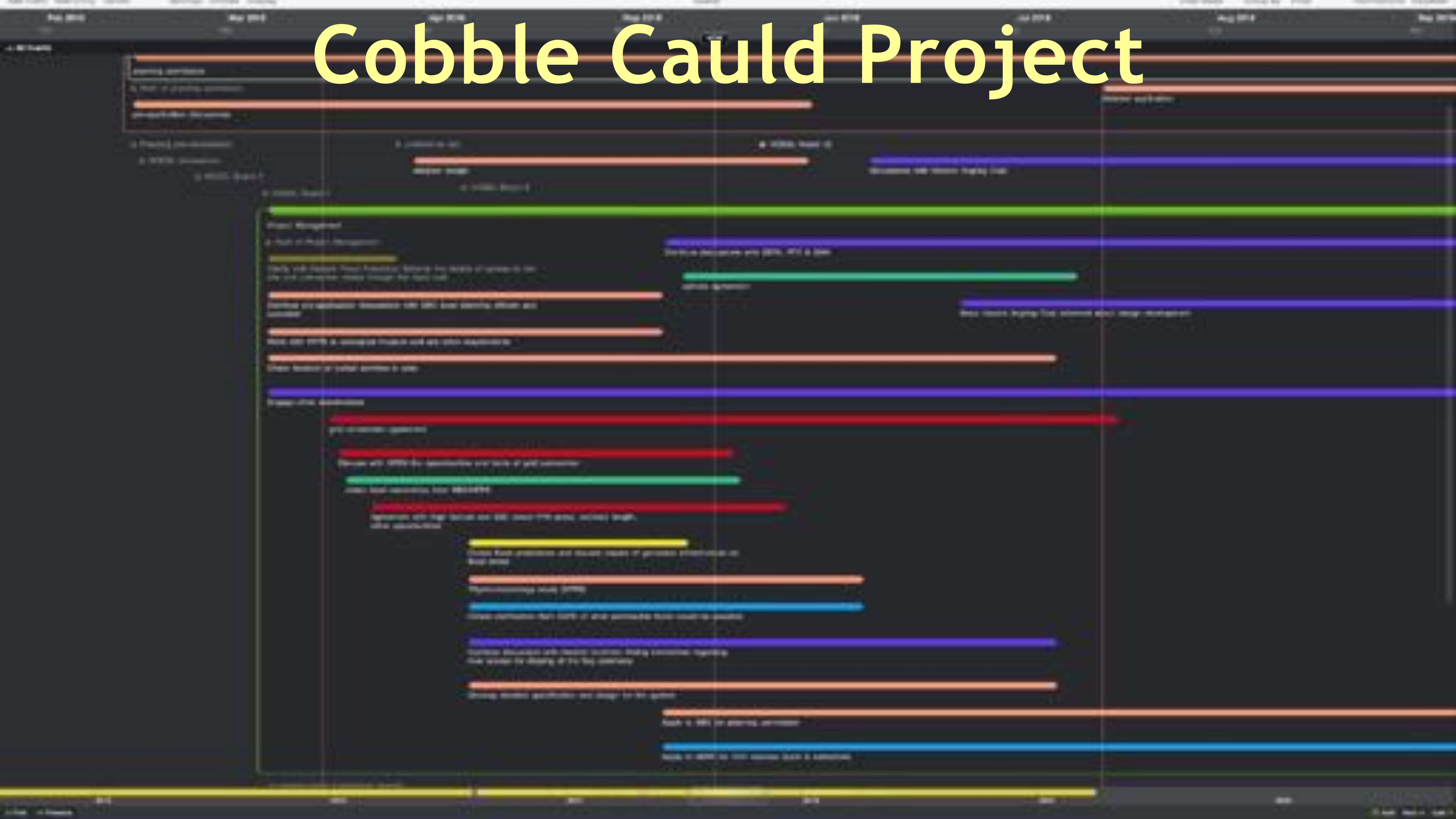
Hawick  
345

### Energy Capture Curve



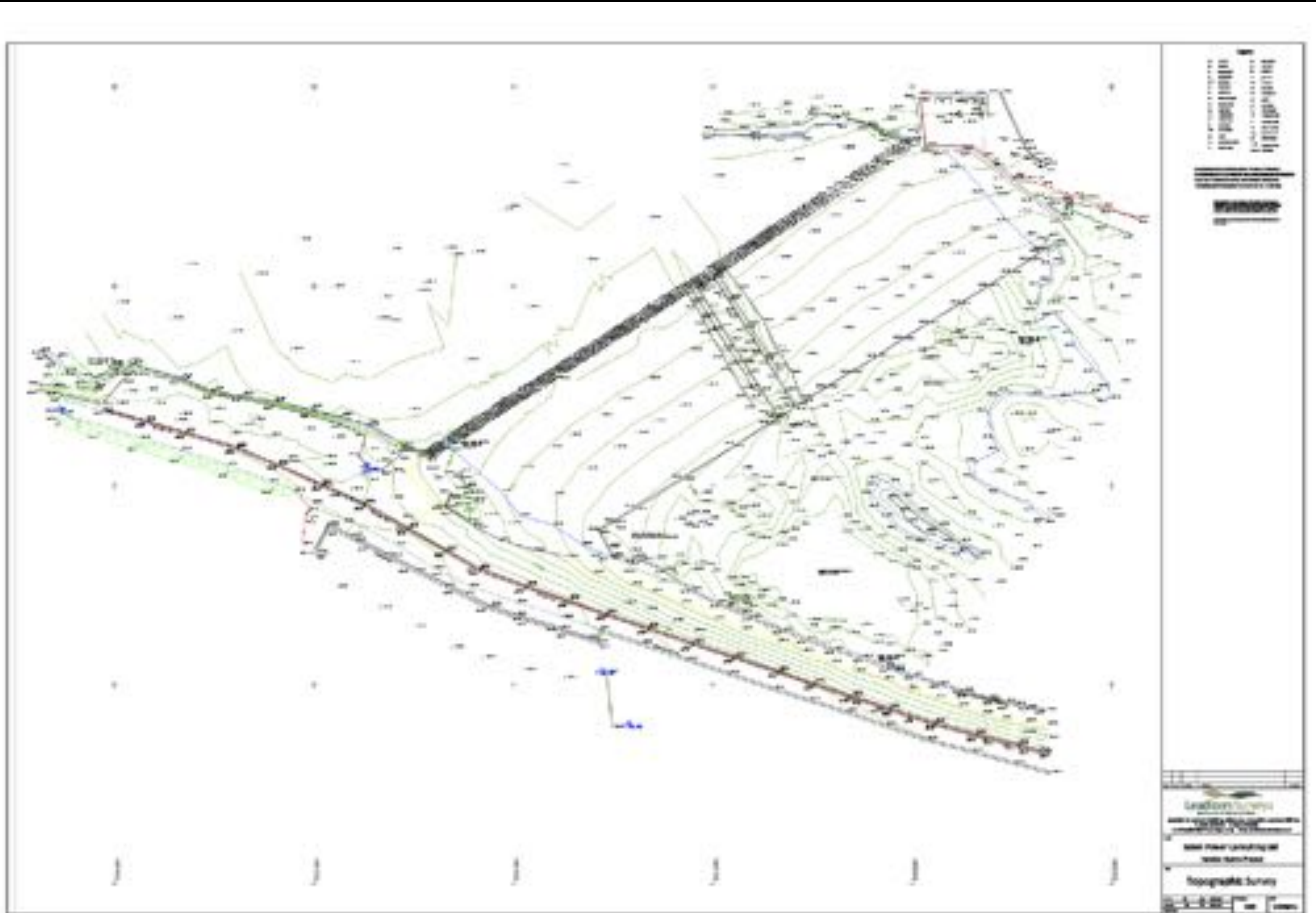


# Cobble Cauld Project





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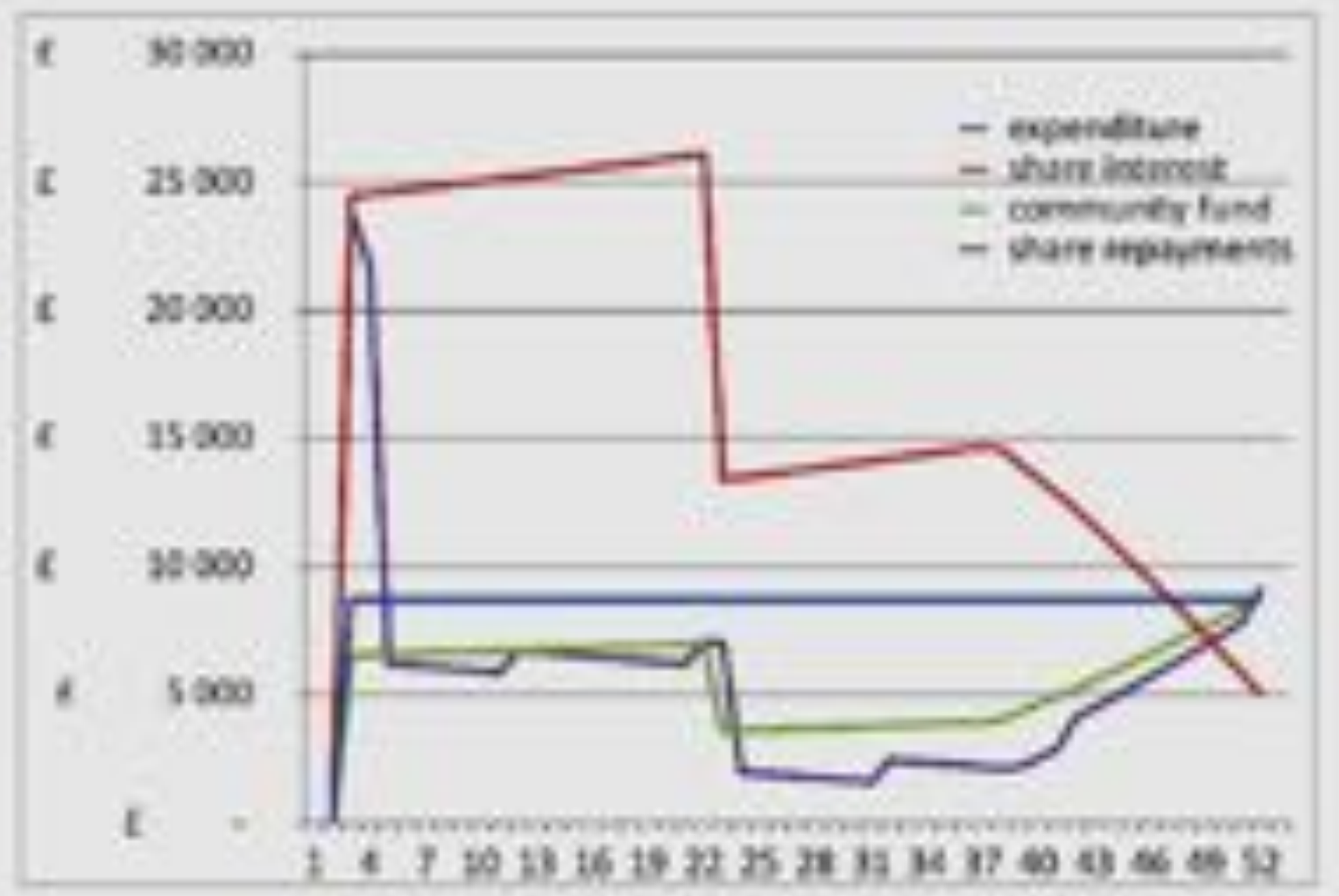
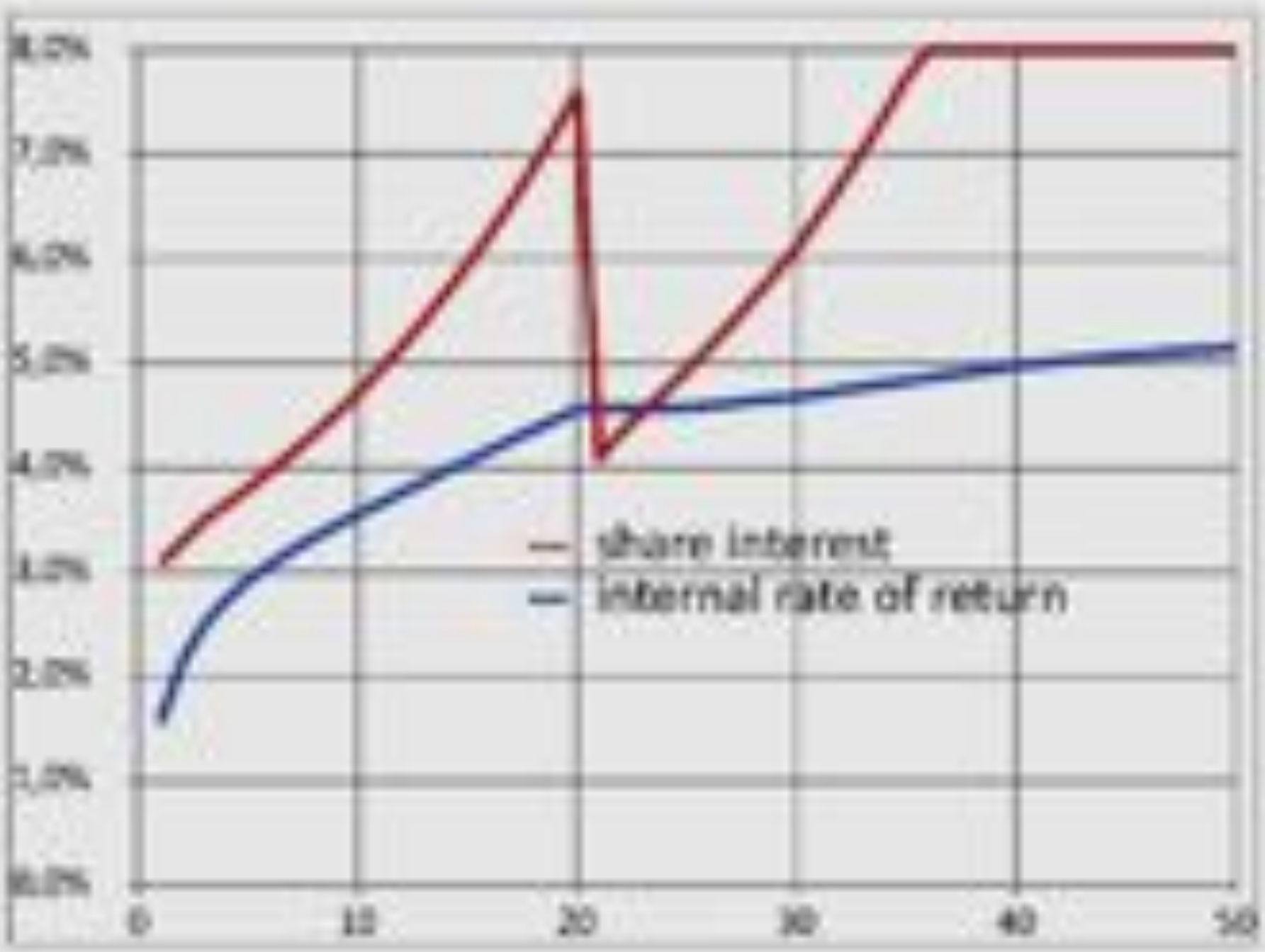


# Cobble Cauld Project

total cost of project	£		total estimate of more detailed costs
grants and gifts	£	5,000	total estimate of initial income
community share raise	£		total estimate of annual sales
starting balance	£	28,155	
cost/year		14.7	years
depreciation	3.4%		20-year half-life
inflation	3.0%		2.5% used in CAPS model
energy price inflation	3.5%		used for PPA only
maximum share interest	8%	3.00%	set up CAPS & use Rules
share churn rate	3%		UK average average of 3%
annual costs - net tax	£	11,957	total estimate of more detailed costs



installed capacity	75 kW
capacity factor	42%
annual generation	275,940 kWh
total FIT	2.71 p/kWh
total PPA	p/kWh
off-peak price	p/kWh
on-peak price	5.00 p/kWh
peak self-use	50% from PPA analysis
off-peak self-use	30% from PPA analysis
gas	5% from PPA analysis
FIT income	£ 21,275 /year
export tariff	£ 690
PPA income	£ /year
total income	£ /y1-20
Community Fund	£ -285,311





# Cobble Cauld Project









# Cobble Cauld Project

## Application for membership of Hawick Community Energy Group Limited

Hawick Community Energy Group Limited (HCEGL) invites membership from people who support its objects to benefit the community by supporting renewable energy generation and raising awareness of environmental and energy issues.

By becoming a member of HCEGL, you will be involved with an enthusiastic organisation that is building on our heritage to create a sustainable future for Hawick, moving towards the zero-carbon goal and addressing the underlying issues that cause fuel poverty and climate change.

Individuals must be at least 16 years old.

### Personal details

name

address

postcode

email address

### Declaration

I hereby declare that I am supportive of the objects of HCEGL and apply for membership of the said society. I enclose payment of £10, for the purchase of one share, being the minimum shareholding required for membership.

date

signed

Membership of HCEGL entitles you to attend all general meetings, vote on all matters including election of officers and to stand for such offices. Voting is carried out on a one member, one vote basis. Your financial liability is limited to the value of your shareholding (which value cannot increase above par but may be decreased at the board's decision as per the rules of HCEGL and in accordance with government legislation). Membership is subject to the Rules of the society, a copy of which can be supplied by the officers.

Office use only		date received	payment received
Rules sent <input type="checkbox"/>		membership number	shares <input type="checkbox"/>
email checked <input type="checkbox"/>		date ceased	

Please hand this form and payment to an officer of the society or post it to: 55 Howdenbank, Hawick, TD9 7JY

## Organisation application for membership of Hawick Community Energy Group Limited

Hawick Community Energy Group Limited (HCEGL) invites membership from organisations that support its objects to benefit the community by supporting renewable energy generation and raising awareness of environmental and energy issues.

By becoming a member of HCEGL, you will be involved with an enthusiastic organisation that is building on our heritage to create a sustainable future for Hawick, moving towards the zero-carbon goal and addressing the underlying issues that cause fuel poverty and climate change.

### Organisation's details

name of organisation

registered Address

postcode

company registration number

type of organisation

### Contact Person

name of contact person

position in the organisation

email address

postal address

postcode

### Declaration

I hereby declare that I am duly authorised by the above-named organisation—which is supportive of the objects of HCEGL—to apply for membership of the said society in my capacity as noted above. I enclose payment of £10, for the purchase of one share, being the minimum shareholding required for membership.

date

signed

Membership of HCEGL entitles you—as representative of your organisation—to attend all general meetings, vote on all matters including election of officers and to stand for such offices. Voting is carried out on a one member, one vote basis. You and your organisation's financial liability is limited to the value of your shareholding (which value cannot increase above par but may be decreased at the board's decision as per the rules of HCEGL and in accordance with government legislation). Membership is subject to the Rules of the society, a copy of which can be supplied by the officers.

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