

# Low Carbon Built Environment

## *Funding Innovation*

27<sup>th</sup> January 2011

Aberdeen

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# Funding Innovation

## BRE SCOTLAND

Low Carbon Built Environment (LCBE)

bre



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Innovation for Success



# Which project and why?

How should we choose?



or



We need a simple, repeatable and systematic process

.... a stage gate process?



Start with the assumption that funders want to find reasons to say 'No'

We need to produce a rock-solid case with no gaps or cracks

# The Challenge to address

**What** – is this all about?

**Why** – are we considering it at all?

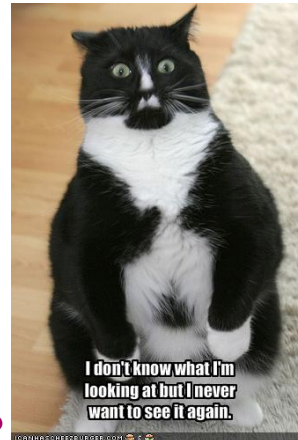
**How** – can we achieve the results?

**Who** – will need to be involved and for how long?

**Where** – will our innovation be placed (in the bigger picture)?

**When** – will we start seeing results and get our return?

and of course - **How much** – will it cost and will it bring back in?



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*I keep six honest serving-men  
(They taught me all I knew);  
Their names are What and Why and  
When  
And How and Where and Who*

Rudyard Kipling - "The Elephant's Child" 1902



# Some fundamentals

- Resources are always restricted
  - people and financial
- Obtaining money is a selling process
  - but funding for innovation is different from selling the final product
- Create the case
  - but let someone else do the education first
- Prepare answers for all the hard questions
  - before they are asked
- Sell internally first
  - to get all the support that you need



# Some sources of funding





# Where does the Project Plan fit in?



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# Project plan

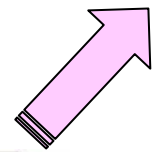
- **Market - the Opportunity**
- How does the proposed innovation fit our company strategy?
- The market characteristics e.g. size, geography, value, volume, growth
- How does the target market defines itself?
- Customer perception of the need for our innovation
- The level of prior commitment from potential customers
- Customers' feedback mechanism
- Sustainable price range for our innovation
- Expected reaction from current or incoming competitors
- Sustainable competitive advantage





# Routes to market

	Existing Route	New Route
Existing Product		?
New Product	?	???



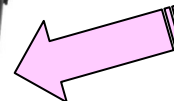
Is there a clear 'Line of Sight' to market?

Are there existing known distribution channels?

Customer endorsements?



Is it feasible?

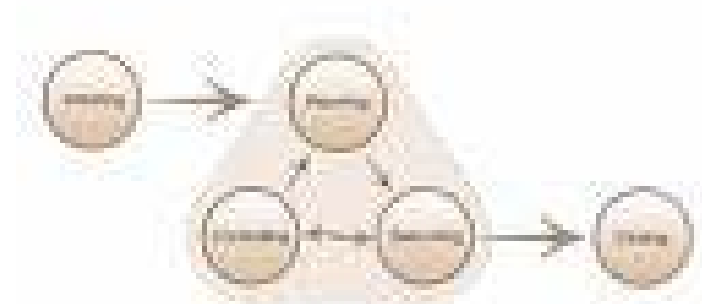


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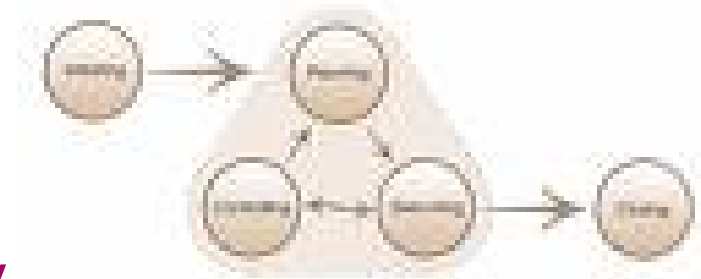
# Project plan

- Market – the Opportunity
  - the route to market
- **Sales**
- Sales forecasts - and how they were derived
- The control which we exercise over our prices
- Key stakeholders relationships in customers' buying process
- Sales commission (if appropriate)





# Project plan

- Market – the Opportunity
  - the route to market
- Sales
  - **Technical and technology**
  - Substitute or disruptive technology
  - Intellectual Property (IP) potential
  - Technical risk
  - Compliance issues
  - Innovator network / transfer of technology
  - Potential to develop into additional product offerings

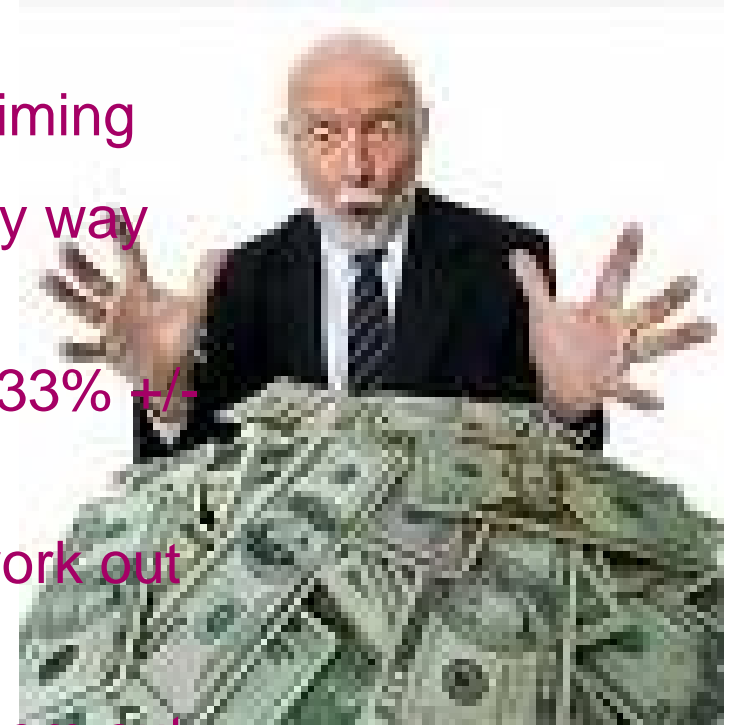


# Development route

	Internal development	External development
Existing Resources, Skills, Experience		Sub-contracting
Additional Resources / New Skills	Recruitment / Staff training	

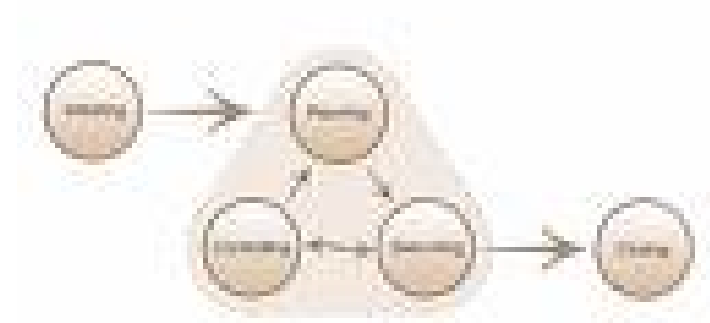
# The financial case

- Construct the financial model for the project's life
- Identify the funding gaps in scale and timing
- Check again if these can be filled in any way from internal resources
- Run sensitivity cases e.g. +/- 25%, +/- 33% +/- 1 std dev, on sales and costs
- Know where the weaknesses lie and work out contingency plans to deal with them
- Set out your assumptions and check them out



# Project plan

- Market
- Sales
- Technical
- Operations
- Finance
- **Team & HR**
  - Resource and Structure
  - The main resources available and resource constraints
  - Staff skills and training needs
  - Project Management
  - Gaps & Growing
  - Motivation & Leadership





# Some general principles

Usually considered as **Revenue** funding e.g.

- working capital – consider impact on ongoing business
- loans – terms, payback timing and impact on ongoing business
- grants – usually subtly different approach needed

What is the allocation and amortisation policy and what are its implications for the funding source(s) in respect of:-

- Capital Costs
- Training and Recruitment Costs
- Intellectual Property (IP):-
  - Background IP
  - Foreground IP

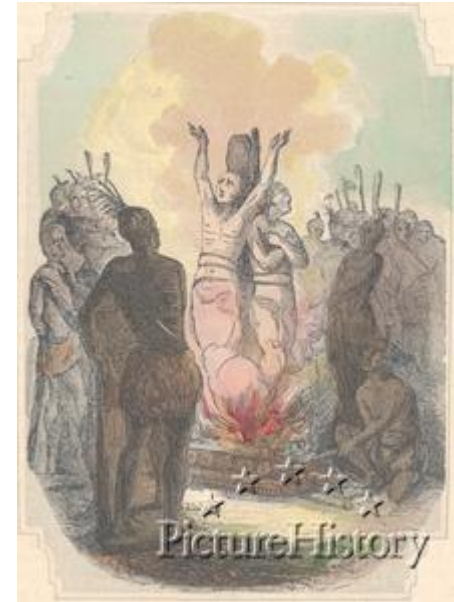


# Beware of .....

- Creeping commitment
- Developing the product  
..... then looking for the market
- Being blinded by technology
- Being the missionary
- Being driven by grant funding ‘opportunities’
- Presentation of technical risk
  - *different strokes for different folks*
- Know your numbers and how they work

Remember - **Benefits**, not features!

**Do your homework!**

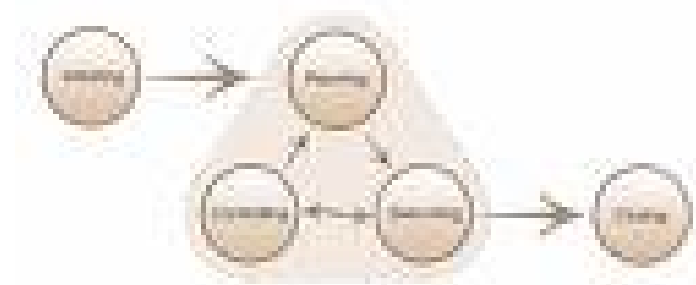


# Project plan

Draw up the overall project proposal, comprising:-

- Market opportunity
- The route to market
- The strategic fit
- Technology and access to it
- Resources required, sought and to be deployed
- Returns expected – financial and co-lateral
- Costs involved
- Gaps and how to fill
- Stakeholder benefits
- Delivery team

and memorise .....



# Where does the Project Plan fit in?



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# Funding proposal

Start from the Project plan:-

- Outline the salient points
- Highlight the strengths of the proposal
- Identify the perceived weaknesses and how these will be addressed
- Identify the funding targets' criteria
- Illustrate how the funding sought will meet these criteria
- Fill in the form and answer **all** the questions

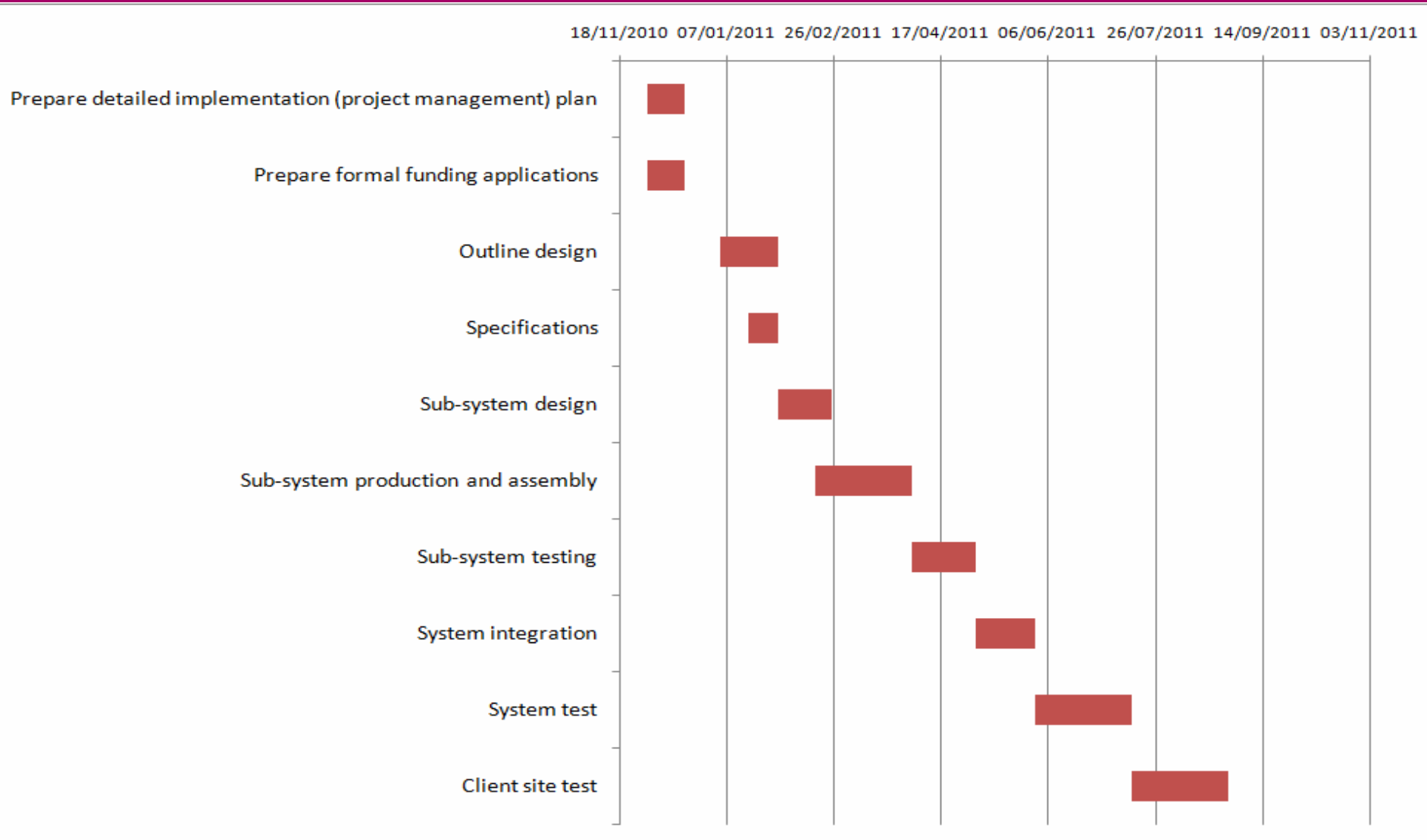




# One page implementation plan

<b>Project:</b>	<b>XYZ Sub-Sea Rodent Removal solution</b>	<b>Promoter:</b>	A.N. Other				<b>Date:</b>	27/10/2010	
<b>Elevator Pitch/Value Proposition:</b>	To develop a subsea rodent removal device to extinguish all amphibious rodent damage to shallow sub-sea installations thus saving clients substantial losses.								
Target market:	The market is offshore drilling operations in water depth <100m .								
Technology available:	Our patented UHF technology platform plus UVW sub-systems. It may introduce a new preferred way of rodent removal.								
Value to customer:	Rodent attack leads to environmental damage which is extremely expensive to correct and is leading to increasing public pressure.								
Competitive advantage:	Whilst we have no competitors yet we can only sustain this competitive advantage if we can get a cheap reliable system in place								
Funding the innovation	We have identified a proporstion of funds internally, and propose to make application for a technology research and development grant								
The need	Direct correspondence from Ruritania NOC telling us about the problems they have had, which is substantial damages and losses from rodent infestation sub-sea								
Value-adding/manufacturing	Most processes are routine but there remain some new processes which will require capital investment								
Future potential:	New standard solution for rodent removal operations. Will replace the regular use of chemicals. Use for shallow water from floating rigs.								
Action No.	Description	Person responsible/ Contribution from	Resources/ Money required	Start date	Duratio n (days)	Completion Date	Completion indicator	Progress to date	Completed
1	Prepare detailed implementation (project	Mr Project Manager	£5,000	01/12/2010	17	17/12/2010	Management committee approval		
2	Prepare formal funding applications	Ms Project Accountant	£5,000	01/12/2010	17	17/12/2010	CEO approval		
3	Outline design	Mr Project Design Engineer	£15,000	04/01/2011	27	30/01/2011	Technical Director approval		
4	Specifications	Mr Project Design Engineer	£10,000	17/01/2011	14	30/01/2011	Technical Director approval		
5	Sub-system design	Ms Assistant Design Engineer	£15,000	31/01/2011	25	24/02/2011	Technical Director approval		
6	Sub-system production and assembly	Ms Technical Engineer	£150,000	17/02/2011	45	02/04/2011	Operations Director approval		
7	Sub-system testing	Ms Technical Engineer	£50,000	03/04/2011	30	02/05/2011	Technical Director approval		
8	System integration	Mr Technical Director	£50,000	03/05/2011	28	30/05/2011	Operations Director approval		
9	System test	Mr Technical Director	£75,000	31/05/2011	45	14/07/2011	Technical Director approval		
10	Client site test	Mr Project Manager	£191,667	15/07/2011	45	28/08/2011	Client & Technical Director approval		

# Gantt Chart





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