# PINK TANK



## *Abstract*

*This business plan presents Pink Tank, a not-for-profit initiative accelerating decarbonisation by promoting pink hydrogen. It addresses low adoption caused by uncertain demand through accreditation, publicity, matchmaking, and funding mechanisms. This will increase market confidence, connect stakeholders, and drive demand, supporting Net Zero goals while delivering environmental and economic benefits.*

# Contents

## 1. Executive Summary

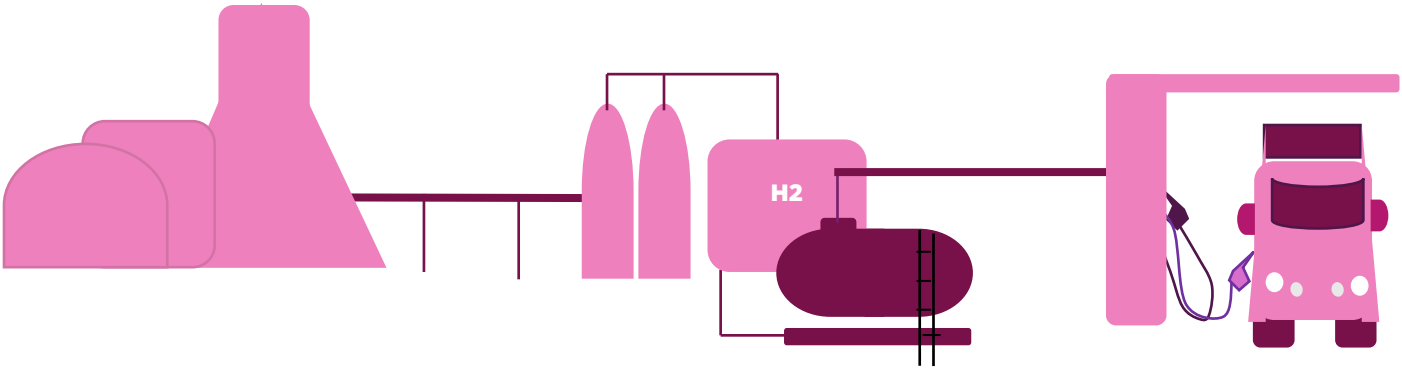
Net Zero target deadlines are fast approaching, and many businesses face the reality that if they do not act now, they risk falling short. While progress in renewable technologies has been significant - particularly in electricity generation - other sectors, such as transport and heavy-duty goods, remain difficult to decarbonise. Pink Tank's mission is focused on addressing this challenge by driving the adoption of pink hydrogen, produced using nuclear energy, and hydrogen-based solutions in the place of current high-emission technologies.

Pink Tank is a UK-based not-for-profit business with a current focus on Anglo-French companies committed to reducing their emissions, with a view to expand globally in the future. We know that a major challenge for hydrogen today is slow uptake driven by a lack of coordinated demand and commercial incentives. Pink Tank aims to bridge this gap through three core branches: Accreditation, Matchmaking and Publicity.

We will offer a paid accreditation service for pink hydrogen consumers, suppliers, and technical experts, with tiered levels recognising progress and enabling companies to demonstrate credible commitment to hydrogen adoption. By building this pink hydrogen network, we will facilitate connections across the value chain - matching producers and suppliers with companies developing and deploying hydrogen technologies. As we drive uptake of pink hydrogen across industry, we will also launch a public campaign to raise its profile and generate excitement among a wider audience.

Funding will be secured via various government grants in net-zero and hydrogen sectors, mission-aligned investors, and accreditation fees. These funds will go into the operation of our services and overhead costs, with any surplus reinvested into growing the businesses impact. The Pink Tank team will begin with a core group of key members and partners who share a belief in pink hydrogen as the solution, growing alongside its adoption.

Unlike existing industry groups, Pink Tank combines accreditation, commercial matchmaking, and public engagement to actively stimulate demand—not just coordinate supply. We are building a community with the power to make a difference and the drive to act now.




***Pink Hydrogen: Hydrogen produced using nuclear energy***

# 2. Strategic Case

## 2.1 Case For Change

The UK and French government are committed to reaching Net-Zero emissions by 2050 under the Climate Change Act (2008) [1] and the Energy and Climate Change Act (2019) [2], respectively. Significant reductions in carbon emissions have been made through the decarbonisation of electricity generation [3] (Appendix Figure 18). However, for both countries to reach Net-Zero goals, other sectors will need to see greater emission reductions. Hydrogen has been identified as a solution, however, 99% of hydrogen is generated by burning fossil fuels[4], a process which emits up to 10kg of CO2 for every kilogram of hydrogen produced. This is not sustainable for reaching net-zero targets.

Low-carbon hydrogen, like pink and green (renewables), are viewed by both governments as the best solution for decarbonising many of these sectors. The UK Governments Ten Point Plan for a Green Industrial Revolution [5] cites hydrogen as “a clean source of fuel and heat for our homes, transport and industry”.

Nuclear energy is best method for producing low-carbon hydrogen. Hydrogen produced using nuclear energy accounts for less emissions than solar, wind and other renewable methods while being more reliable and 20-30% more efficient [6]. However, as the International Energy Agency (IEA) has identified, the largest challenge to reach the necessary levels of hydrogen production as set out in Global Hydrogen Policies is uncertain demand [7].

## 2.2 Theory of Change

### *2.2.1 Importance of Demand*

Securing demand for Pink Hydrogen is key to the successful adoption of Pink Hydrogen. Due to the high upfront cost of pink hydrogen production projects, demand for hydrogen needs to be secured prior to a project getting its Final Investment Decision to reduce financial risk. An EDF Front End Engineering Design study (FEED study) determined that the addition of a 24MW high efficiency hydrogen production facility into an existing Nuclear Power Station (NPS) would cost £88.6M [8].

When demand is secured, however, pink hydrogen is a viable option as demonstrated by the Hydrogen in Aviation Alliance (HIAA). The HIAA [9] is a cross-industry alliance that uses pink hydrogen to decarbonise flights out of Bristol Airport using Sustainable Aviation Fuel (SAF). They have achieved this by securing demand and confidence throughout the whole pink hydrogen lifecycle. Pink Tank aims to replicate this success across a wide range of industrial sectors.

## 2.3 Pink Tank's Solution

Pink Tank is a not-for-profit users accreditation group accelerating the adoption of pink hydrogen to reduce greenhouse gas (GHG) emissions.

Pink Tank will stimulate demand using four distinct methods that will work together to create a positive feedback loop: Accreditation, Publicity, Matchmaking and Funding.

### *2.3.1 Accreditation*

Pink Tank's tiered accreditation scheme will provide member Consumers (pink hydrogen end-users), Suppliers (producers of pink hydrogen and related technologies) and Technical Experts (e.g. consultants and project management in pink hydrogen) with a recognised standard for pink hydrogen adoption. By certifying a companies' level of pink hydrogen adoption and subsequent reduction in GHG emissions, we enhance their environmental credibility. This makes accredited organisations more attractive to partners and customers, generating a commercial incentive for pink hydrogen adoption. As more companies seek accreditation for competitive and reputational advantages, pink hydrogen demand increases.

More information on Pink Tank Accreditation can be found here

### *2.3.2 Publicity*

Public engagement with pink hydrogen solutions has a strong correlation with positive attitudes towards the adoption of hydrogen solutions [10]. Pink Tank will raise pink hydrogen's profile making it both an attractive net-zero option for businesses and a powerful marketing tool to improve public perception. This will raise awareness among industry decision makers and incentivise them to adopt pink hydrogen technologies. This makes publicity a major benefit for companies as they become more attractive partners for future clients, customers, and the general public.

Pink Tank will develop a strong brand identity by running large scale publicity campaigns, using similar methodology to Red Bull. Pink Tank aims to catch the eyes of millions every day, creating a positive bias towards pink hydrogen on both a consumer and industry level. Examples include:

- Track Days: sponsored show-runs of pink hydrogen fuelled or sponsored race cars at high-profile events. These events are often attended by both consumers and high-level members of other companies, allowing for high reputational gain.
- Air Shows: Pink Tank will sponsor companies prototyping hydrogen aircraft to fly at airshows, which have high public and industry attendance.
- Educational Events: Pink Tank will fund events in schools, raising awareness around pink hydrogen by demonstrating small scale technology, science experiments, and interactive activities for students.

More information on Pink Tank events can be found here

### *2.3.3 Matchmaking*

Pink Tank offers a matchmaking scheme for its accredited members. Our technical team will collaborate with companies looking to increase their adoption of pink hydrogen technologies and match them with the organisations capable of supplying pink hydrogen. This will provide benefits for all participating organisations, connecting an otherwise fragmented market.

More information on Pink Tank Matchmaking can be found here

### *2.3.4 Funding*

As a Non-for Profit, Pink Tank will allocate some of its surplus earnings for grants. These grants will be allocated by Pink Tank to projects with the most cost-effective impact on carbon emission reductions using pink hydrogen. This provides much needed support for new pink hydrogen technologies and adoptees.

## 2.4 Effect on Pink Hydrogen Sector

Pink Tank will create a positive feedback loop across the pink hydrogen sector by building strong brand recognition and trust for accredited members. As the Pink Tank brand develops a positive association through our publicity campaigns and success stories, pink hydrogen awareness will increase amongst the industry and public. The increased visibility drives demand for pink hydrogen technologies, granting further business for accredited members and allowing them to invest in affordability and efficiency which will lower pink hydrogen prices. The credibility generated by Pink Tank's accreditation scheme will allow accredited members to easily secure capital investment which supports market growth and long-term change.

## 2.5 Societal Impact

By creating demand for pink hydrogen and increasing adoption, Pink Tank will have a multitude of positive socio-economic impacts. This includes greater domestic energy supply, increased employment through new pink hydrogen jobs, reduction of CO2 emissions, and improved public health through improved air quality.

# 3 Economic Case

The purpose of the economic case is to demonstrate and justify the value that Pink Tank brings to the public, the environment, the economy, and respective business partners by comparing alternative options.

## 3.1 Critical Success Factors and Key Performance Indicators

Pink Tank has identified 7 key areas of measurable success that will result in successful project delivery. These have assisted in identifying methods to boost pink hydrogen production and use. This can be viewed in Figure 1

| Critical Success Factor | KPIs | | |
|---|---|---|---|
| | Year 1 | Year 2 | Year 3 |
| Demand Increase<br>Increase the market demand of clean, Pink hydrogen | Total Volume of Pink Hydrogen Distributed from Accredited or Partnered Companies :<br>>= 10 Tonnes/Year | Total Volume of Pink Hydrogen Distributed from Accredited or Partnered Companies :<br>>= 30 Tonnes/Year | Total Volume of Pink Hydrogen Distributed from Accredited or Partnered Companies :<br>>= 50 Tonnes/Year |
| Industry Adoption<br>Encourage Industry adoption of Pink Hydrogen | - 1 Consumer-Producer pair matched | - 6 Consumer-producer pairs matched<br>- At least 3 Industries engaged e.g. transport | - 10 Consumer-Producer pairs matched |
| Costs<br>Achieve Financial Viability | - >= 1 Funding Partner Secured | Discounted fuel prices for companies participating in the credit system | - Break even |
| Manage Risk Effectively<br>Manage risk throughout the scope of operation | 100% Compliance with Regulatory requirements<br>100% of Identified Risks have Mitigation Plans<br>0 Critical Incidents (safety/internal failure) | | |
| Market Engagement<br>Establish company recognition and trust in pink hydrogen | - Campaigns reach 250,000 people<br>- 5 Accredited Companies | - 15 Accredited Companies | -Campaigns reach 1,000,000 people<br>- 30 Accredited Companies |
| Environmental Impact<br>Deliver Measurable Environmental Impact | - Compliant with Net-zero expectations and regulations | ->=50% Lower lifecycle emissions than fossil fuels | - 15% increase in availability of Pink Hydrogen<br>- >=70% Lower lifecycle emissions than fossil fuels |
| Fairness<br>Ensure an objective, truthful accreditation and matchmaking process | - Outline and publish our Accreditation Standard<br>- Collect and use customer feedback | - all customer feedback actioned on | - Trusted and recognised accreditation scheme in the Hydrogen industry |

*Figure 1: Critical Success Factors (CSFs) and Key Performance Indicators (KPIs)*

## 3.2 Options Appraisal

### *3.2.1 Long-list Appraisal*

Several options were identified for a way of managing the business' goal to boost pink hydrogen demand:

1. Baseline - We do not act, and the pink hydrogen market and industry continues as it is without intervention or challenge.
2. Government-based Subsidy Scheme - Use government funding focused on subsidising pink hydrogen production costs and incentivising producer innovation.
3. Infrastructure Development Approach - Directly facilitate the building, maintaining, and operating of pink hydrogen infrastructure.
4. Matchmaking and Accreditation Scheme - Match producers with consumers based on a data-driven approach, backed up by a verification standard to promote collaboration and aggregate demand.

### *3.2.2 Short-list Appraisal*

Figures 4-7 in the Appendix were used to assess each option's Strengths, Weaknesses, Opportunities and Threats (SWOTs). These provided the necessary information to further assess each approach against the Critical Success Factors (CSFs). A score for each CSF was awarded based on the significance of each SWOT

category. The overall results are shown in Figure 2, identifying Option 4, the Matchmaking and Accreditation Scheme, as the 'Preferred way Forward', with a higher score than other approaches.

| Short-List Options | Critical Success Factors (1= Low/Poorly, 5= High/Very Well) | | | | | | |
|---|---|---|---|---|---|---|---|
| | Demand Increase<br>How well the approach increases the demand of Pink Hydrogen | Industry Adoption<br>How well the approach encourages the Adoption of Pink Hydrogen | Costs<br>How Expensive the approach is | Risk Management<br>How Risky is the Approach (1=very risky) | Market Engagement<br>How well the approach establishes reach and trust in Pink Hydrogen | Fairness<br>How accessible the service is to ALL consumers | Environmental Impact<br>How effective the approach is in assisting Net Zero |
| Option 1- Baseline | 1 | 1 | 5 | 5 | 1 | 3 | 1 |
| Option 2- Government Subsidy Scheme | 4 | 3 | 1 | 2 | 3 | 2 | 4 |
| Option 3- Infrastructure Development Approach | 3 | 3 | 1 | 1 | 2 | 2 | 4 |
| Option 4- Pink Tank | 4 | 5 | 4 | 3 | 5 | 4 | 4 |

*Figure 2: CSF Scoring of Options*

A key area where Option 4 prevailed include the marketing approach, aiming to facilitate pink hydrogen market growth from the bottom-up, focusing on building public attention to subsequently drive private innovation. This, along with the expected low overhead in running the business were the main contributors to Option 4's success.

## 3.3 Cost-Benefit Analysis

The purpose of the cost-benefit analysis was to justify the costs of the Preferred Way Forward, both financially, socially, and environmentally against the respective benefits that would be achieved. This can be found in Figure 8. Ultimately, it was found that the largest costs came in the form of marketing and salaries. The benefits for these expenses included greater employee morale and subsequent productivity, improved social perception of pink hydrogen through successful marketing and an increased customer base, enabling steady market growth.

## 3.4 Risk Assessment

There are several risks and opportunities to running Pink Tank aligned with Option 4. The Risk and Opportunity management process can be viewed in the appendix under Figure 13. This matrix is preliminary, however as the business progresses, it will be subjected to frequent updates to remain on top of risks.

Some of Pink Tank's most significant risks are due to a lack of confidence in our accreditation scheme. Mitigation methods include adopting a culture of transparency and accountability by publishing our matchmaking and accreditation frameworks, whilst also encouraging users to send feedback. This adds to the continuous improvement of Pink Tank.

# 4 Commercial Case

This section demonstrates that Pink Tank has a viable solution for the delivery of the project goals.

## 4.1 Procurement Strategy:

At its core, the Pink Tank procurement strategy is based around acting as a 'middle ground' membership platform, connecting Consumers, Suppliers and Technical Experts. As a result of this, Pink Tank aims to adopt a collaborative partnership-based procurement model [11], where value is delivered through the coordination of multiple stakeholders and accreditations as opposed to physical assets. The collaborative nature of our approach enables continuous supply-chain rewarding as Pink Tank develops.

Pink Tank will connect the three key market groups via our Pink Tank Accreditation Network, available to all members and accredited organisations. This will function as our central procurement mechanism, linking both suppliers and end users for various benefits, some of which are identified on the Pink Tank website. Through this, Pink Tank will identify and engage with organisations across the supply chain, assessing them against a set of accreditation criteria based on their level of hydrogen adoption [12]. Pink Tank's tiered accreditation model is designed to allow all organisations to participate, regardless of size.

Pink Tank operates trusted matchmaking between accredited members facilitated by our membership-based procurement model. This helps us establish a recognised framework for pink hydrogen procurement. This creates a partnered ecosystem which allows organisations to confidently source hydrogen-based solutions, support producers in accessing a reliable customer base, and drive overall market growth. This will be achieved through credibility, transparency, and coordinated demand aggregation.

Fairness is maintained throughout the matchmaking process by assigning a score to each accredited company based on data-based values. These scores are scaled to the relative size of the company before our technical team individually assesses the compatibility of the matches. To maintain transparency, we have published our matchmaking framework on our website as well as adopting strict bias prevention functions within the organisation.

## 4.2 Contractual Arrangements

Unlike conventional contractual arrangements, Pink Tank will implement a multi-party contractual framework to support our accreditation-based model. At the centre of this are Pink Tank's Accreditation Agreements under which all participating organisations commit to providing baseline emission reports in accordance with ISO 14064 [13] and the GHG protocol [14], amongst other agreements. This ensures standardisation across all Pink Tank accreditations, which boosts our credibility. Moreover, this approach prevents organisations from greenwashing, the provision of misleading environmental data [15].

Commercial transactions, such as pink hydrogen supply agreements, will be facilitated by Pink Tank but executed directly between members, with Pink Tank not acting as a contracting party. Accreditation contracts will include provisions for performance monitoring, data sharing, and compliance, alongside flexible terms such as termination clauses to allow for adaptability across the system.

## 4.3 Charging Mechanism

A Pink Tank Accreditation is a membership, charged monthly or annually. Prices for all services are scaled on company size only. This accounts for complexities associated with auditing larger companies and eases entry for smaller business. The expected price per organisation is bracketed based on company size, using annual turnover as reference. Information on annual turnover is publicly accessible under the Companies Act 2006 [16]. Under this act, small companies can choose to omit their turnover, in which case a standard charge of £2K (€2.4K) will be applied. Companies requesting supply chain accreditations must request a separate quote, where our technical team can assess the expenditure required on a case-by-case basis. The general Accreditation tier framework can be found in Figure 19.

# 5 Financial Case

## 5.1 Capital and Revenue Requirements

Pink Tank aims to obtain funding through access to government grants in upcoming Net-zero and hydrogen sectors, as well as from investors. Figure 12 shows Pink Tank's projected expenses in year one based on a 'base case' revenue scenario alongside 'optimal' and 'minimal' expenditure. The optimal and minimal expenditures are defined based on the size of Pink Tank's Team as salaries are our greatest expense, for instance, whether that is seven people (optimal) or thee people (minimum). Since Pink Tank aim to adopt a hybrid working strategy, Pink Tank plan to operate remotely for the first few years to save costs and then rent a medium sized office space [17].

| Year | Number of Accredited Members | Average Fee (£) | Revenue (£) |
|---|---|---|---|
| 1 | 12 | 7,000 | 84000 |
| 2 | 30 | 7,000 | 210000 |
| 3 | 60 | 7,000 | 420000 |
| 4 | 100 | 7,000 | 700000 |
| 5 | 150 | 10,800 | 1620000 |
| 6 | 210 | 10,800 | 2268000 |
| 7 | 300 | 10,800 | 3240000 |
| 8 | 400 | 10,800 | 4320000 |
| 9 | 500 | 10,800 | 5400000 |
| 10 | 600 | 10,800 | 6480000 |

*Table 1: Base Case Forecasted Revenue*

Tables 1 (above) and 3 and 4 (Appendix) show the forecasted revenue. This has been constructed based on assumptions identified in Figure 10. These assumptions include details on how the base case, best case and worst case are calculated as well as anticipated market growth. Pink Tank has identified two values of required funding, averaged together to generate a 'base case' value. Projected sales assume 12 different sized companies in year one, with an average fee per company of £7000. This averages to one new accredited member per month; a figure obtained during our early development having secured interest in our accreditation scheme within our first month. This was extrapolated, with growth anticipated alongside the hydrogen market. This interest was based on responses to the free membership application form on our website as shown in Figure 11.

Figure 12 also shows the expected estimated surplus and loss per year based on the expected revenue and anticipated expenditure. Pink Tank is due to break even between years two and three when operating under minimal expenditure, and between years three and four under optimal expenditure. This conservative estimate meets our CSF KPI to break even in year three.

Pink Tank aims to take a minimal expenditure approach to break even in the third year. This will require funding totalling £100,000 to cover initial salaries and startup costs over at least three years. Additional funding may also be secured as part of financial risk mitigation. One of the benefits of operating a not-for-profit is that all our surplus will be immediately reinvested, allowing for rapid growth.

## 5.2 Financial and non-financial Benefits

Figure 8 displays the Cost-Benefit analysis for Pink Tank. Pink Tank is projected to grow financially as Accreditation credibility and marketing influence increases.

Pink Tank will also drive the educational sector to improve perception of nuclear and hydrogen industries.

## 5.3 Future Growth

As the Pink Tank organisation grows with the pink hydrogen market, we aim to expand globally with a large organisational structure, as shown in Figure 14.

# 6. Management Case

## 6.1 Project Management and Organisation Structure

To ensure management best practices are followed, roles and responsibilities have been identified in the Organisational Chart (ORG chart) shown in the appendix as Figure 14. Figure 17, the Skills Matrix also in the appendix, is populated with expected entry level skills for each role. Further progression into the various levels is facilitated via training workshops and accrued experience. By maintaining this structure, all members within the organisation are automatically aware of the relevant authority levels, responsibilities, and structure, enhancing company communication. Pink Tank operates under a three-step structure: Strategic Level (Technical board), Executive Management Level, and Functional Delivery Level (Employees). There will be mandatory conflict of interest disclosures preventing board members from influencing the accreditation outcomes for any affiliated companies.

To support the organisation structure, quarterly review meetings will be made across each of the teams to map progress across the KPIs found in Figure 1, as well as to voice any concerns.

## 6.2 Change Management

Change Management Procedures (CMPs) are imperative for control over Pink Tank. The CMP flowchart is found in Figure 16; identifying and recording change, the approval process and the implementation of the change.

## 6.3 Approach to Management and Benefit Delivery

Pink Tank adopts a hybrid project management approach. This hybrid approach combines structured planning with flexible delivery. In this model, the accreditation system development will follow a more structured approach, whilst marketing and partnerships adopt a more flexible method.

Benefits will be structurally delivered based on the KPIs and CSFs found in Section 3.1. Benefits will be delivered incrementally, beginning with early adopters and scaling through industry partnerships. Continuous marketing-based engagement ensures that Pink Tank's outcomes remain aligned with project objectives.

## 6.4 Risk Management

The Risk Management procedure has been set out in Section 3.4 and evidenced under Figure 13. Figure 13 Identifies and mitigates the preliminary risks found prior to project initiation. This will be continued alongside Pink Tank's development through a 6-weekly risk review with all teams. It is the responsibility of the team leaders to monitor risk, with the team members as resource.

## 6.5 Implementation Monitoring and Post-Implementation Evaluation Arrangements

The vigorous progress monitoring of Pink Tank in the post-implementation phase is vital for the management of the project. This will be measured by quarterly review meetings, where the business is assessed on the KPIs and CSFs in Section 3.1. The findings will then be communicated throughout teams, with leaders given actions based on work required to meet or surpass the CSFs. As Pink Tank progresses, these meetings will enable discussions of future CSFs and KPIs.

Furthermore, these review meetings will measure deadline progress, set out within company Gantt charts. These will be developed alongside schedule expectations. Member feedback will be monitored around the clock, with any issues resolved as a point of urgency.

# 7. Carbon Case

The purpose of the Carbon Case is to assess Pink Tank's ability to reduce CO2 emissions. The nature of Pink Tank being an intermediary body between Suppliers, Consumers and Technical Experts gives several opportunities for carbon savings.

## 7.1 Hydrogen Production

Grey hydrogen currently accounts for around 99% of all produced hydrogen [7], emitting an average of 10kg of CO2e/kg of H2 [4]. Comparatively, pink hydrogen accounts for less than 1% of produced hydrogen and produces an average of 0.31kg of CO2e/kg of H2 [18]. Due to increasing pressure from clean hydrogen policies, governments are steering away from grey hydrogen production, due to be replaced by low-carbon alternatives.

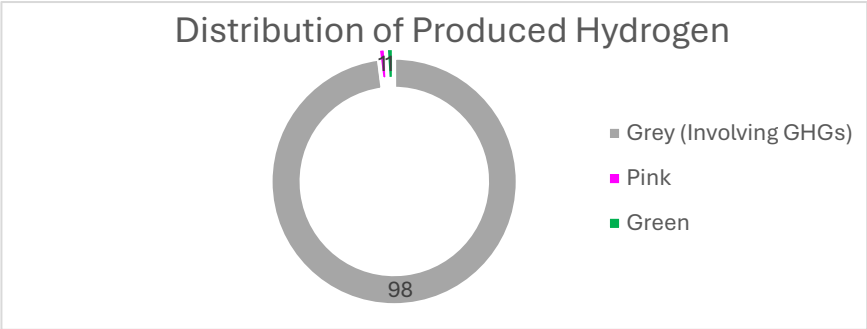



*Figure 3: Distribution of Produced Hydrogen*

Pink Tank aims to increase UK pink hydrogen production capacity to 3.0GW over a ten-year period by aggregating demand and building market confidence and verifiability. A production capacity of 3.0GW would abate 7.6Mt (million tonnes) of $CO_2$ annually scaled based of a 2021 report by the Hydrogen Council [19]. Pink Tank's actions will enable continued increase in pink hydrogen production in the UK and globally, driving progress towards Net-Zero targets.

## 7.2 Internal Carbon Reduction Targets

To maintain net-zero goals internally, Pink Tank is dedicated to maintaining standards for internal net-zero and sustainability requirements. This is to be enforced through employee training and from our internal environmental assurance manager.

| Carbon Target | Description |
|---|---|
| Net-Zero Office | Net-zero office emissions by year 3 of working in the office |
| Planting Trees (Ecosia) | All employees using the Ecosia browser for work |
| Recycling | Full recycling system in place and enforced in the office |
| Surplus | 80% of Surplus going to aid sustainability efforts around pink hydrogen |

*Table 2: Internal Net Zero Targets*

# 8. Conclusion

Pink Tank will facilitate development and adoption of technologies to tackle difficult Net-Zero challenges. Our three core pillars of accreditation, matchmaking and publicity will strategically align producers, technical experts, and users. This will drive the global adoption of pink hydrogen across a multitude of sectors making it widely used and widely known. This business case highlights how funding will be procured from various sources, the procurement strategy to successfully connect key players, and the long-term view of the organisations structure that will make Pink Tank and pink hydrogen a success. The last decade of net-zero progress has brought us this far, but the hardest work is only just beginning - and we cannot let momentum stall now; the toughest sectors remain.

# Appendix

| S | W | O | T |
|---|---|---|---|
| **Option 1: Baseline - Do Nothing**<br><br>Industry adoption and social understanding of Pink Hydrogen continues at its current rate. | | | |
| **Strengths** | **Weaknesses** | **Opportunities** | **Threats** |
| - Zero expenditure<br><br>- No implementation risk<br><br>- Scope is incredibly easy to deliver<br><br>- No deadlines or KPIs to be hit<br><br>- Zero disruption to Markets in the fossil fuel industry amongst others<br><br>- No behavioural change required from companies<br><br>- No requirement for education or drive for social change required<br><br>- No marketing required | - Pink Hydrogen market continues expanding at an slow rate<br><br>- No incentives for innovation or industry change<br><br>- Hydrogen Market continues to suffer from high costs and low demand<br><br>- Dependence on fossil fuels remain unchallenged by Pink Hydrogen<br><br>- Heavy Duty transport sector lacks a worthwhile decarbonisation solution<br><br>- No progress towards Net-zero targets; emissions remain high.<br><br>-Missed economic opportunity with no new jobs or growth | - Opportunity to avoid risks or failure | - Unmanaged Greenhouse Gas (GHG) emissions accelerate global warming resulting in permanent global consequences<br><br>- Failure to meet national and international net-zero targets<br><br>- Pink Hydrogen fails to compete with other forms of hydrogen, e.g. green or grey<br><br>- Fossil-fuel reliant industries can expect tightening environmental regulations<br><br>- Fossil-fuel prices are expected to become more volatile<br><br>- Continued fossil-fuel dependency will make future transition more difficult and expensive<br><br>- Risk of falling behind other nations in alternative fuels progress |

*Figure 4: SWOT analysis of Option 1: Baseline*

| S | W | O | T |
|---|---|---|---|

**Option 2: Government Subsidy Only**

A Government scheme to directly reduce the cost of Pink Hydrogen via financial support mechanisms.

| Strengths | Weaknesses | Opportunities | Threats |
|---|---|---|---|
| - Provides instantaneous reductions to Pink Hydrogen prices<br><br>- Producer of Pink Hydrogen directly receives the government subsidary<br><br>- Simple and easy to implement<br><br>- Promotes demand<br><br>- Encourages further Pink Hydrogen production, infrastructure investment and end-use innovation<br><br>- Helps meet National Net-Zero goals<br><br>- Eases decarbonisation transitions | - Requires continual funding at a high cost to the governing country<br><br>- Dependent on Government financial support<br><br>- Not scalable outside of the governing country<br><br>- Doesn't incentivise companies to switch who arent already interested in alternative fuels<br><br>- Doesnt solve educational barriers<br><br>- Lacks branding or awareness components that would boost public engagement<br><br>- Risk of financial inefficiency if subsidaries are distributed equally towards all companies of varying sizes and sustainability budgets | - Opportunities for additional jobs in the Civil Service surrounding Pink Hydrogen Subsidies<br><br>- Opportunity for rapid market growth, enabling innovation<br><br>- Upcoming and existing environmental regulations encourages industries to consider Pink Hydrogen | - Risks of changes, delays and deletions of the Government policy brings uncertainty to investors<br><br>- Government Budget restraints may result in a fluctuation of subsidaries offered<br><br>- Public funding may discourage innovation and squash potential competitors<br><br>- Could face public opposition during times of economic pressure<br><br>- Smaller companies are less able to access subsidies and may be locked out, reducing competition and adoption across the sector<br><br>- Risk of withdrawal shock if subsidies are eventually reduced, causing loss of progress |

*Figure 5: SWOT analysis of Option 2: Government Subsidy*

| S | W | O | T |
|---|---|---|---|

**Option 3: Infrastructure Development Approach**

Facilitation into the building, maintaining and operating of Pink Hydrogen infrastructure, including building Small Modular Reactors (SMRs), refuelling stations and the distribution system from producer to end-users.

| Strengths | Weaknesses | Opportunities | Threats |
|---|---|---|---|
| - Provides the infrastructure necessary to support the Pink Hydrogen Market<br><br>- Helps reach Net-Zero Goals<br><br>- Would ease future Net-Zero transitions (when operating)<br><br>- Enables Pink Hydrogen Innovation | - Extremely high upfront and ongoing costs<br><br>- Enables but does not incentivise company innovation towards Net Zero<br><br>- Would not be an instantaneous assistance to the market as infrastructure needs time to build.<br><br>- Lacks branding or awareness campaigns that would boost engagement<br><br>- Infrastructure building would create GHG emissions which would not be offset upon failure to deliver the full scope | - Scalable to other countries in need of Pink Hydrogen infrastructure<br><br>- Opportunities to secure Government funding by assisting in Net-Zero and Hydrogen targets<br><br>- Opportunities to partner with existing companies with the potential to provide Pink Hydrogen infrastructure | - Major competition in all markets, especially the SMR market.<br><br>- Public and Political opposal to Nuclear Power would be hard to shake without an awareness campaign<br><br>- Easy for competing companies to replicate |

*Figure 6 :Option 3: SWOT of Infrastructure Development Approach*

| S | W | O | T |
|---|---|---|---|

**Option 4: Accreditation system**

Encourages Pink Hydrogen innovation with a reward and accreditation incentive combined with a large awareness and marketing campaign

| Strengths | Weaknesses | Opportunities | Threats |
|---|---|---|---|
| - Marketing aspect promotes behavioral change<br><br>- Low overhead and low operating costs<br><br>- Rewards technological innovation in the Pink Hydrogen sector<br><br>- Directly contributes to Net Zero goals<br><br>- Connects producers, infrastructure providers and end users<br><br>- Accreditation system builds trust between users and prevents greenwashing<br><br>- Easily scalable<br><br>- Marketing includes educational aspect to improve public perceptions of Nuclear and Hydrogen | - No instantaneous boost to demand<br><br>- Will take time to develop accreditation credibility<br><br>- Relies on infrastructure developments<br><br>- Relies on partnerships for initial stages | - Growing demand for decarbonisation makes Pink Hydrogen a viable option<br><br>- Pink Tank tackles supply chain emissions which are facing increasing pressure to decarbonise<br><br>- Pink Tank can leverage on Government investments in Net-Zero and Hydrogen production<br><br>- First mover advantage in hydrogen sourcing accreditation<br><br>- Early involvement positions Pink Tank to benefit from long-term cost reductions<br><br>- Easy to expand beyond the UK and France | - Marketing campaign may be ineffective<br><br>- Competition from alternative technologies e.g. Green hydrogen and Evs<br><br>- Failure to build strong partnerships<br><br>- Accreditation credibility backlash if seen as weak |

*Figure 7: SWOT of Option 4 Accreditation System*

| | Cost | Benefit |
|---|---|---|
| Internal Management and Governance | Manpower salary of £50K pppy | Improved productivity and employee satisfaction |
| | Office costs £6,500 pppy | Office environment promotes collaboration |
| | quipment costs i.e Laptops, Desks, Stationary approx £2.5K p | Improved productivity and employee satisfaction |
| | Maintenance of Office £10K/yr | Improved productivity and employee satisfaction |
| | Accident Prevention Costs £100/yr | Prevents preventable injury, saving on average £3000 per injury and ensures employee morale is high |
| Marketing | Initial marketing budget of £20K per year | Pink Tank reaches more customers |
| | | Pink Hydrogen awareness and education is increased |
| | | Pink Tank reaches more paying sponsors |
| | | Estimated monetary benefit of £50K/yr if 200K people are reached |
| | Website running costs approx £20/year | Pink Tank reaches more customers |
| | | Pink Tank reaches more paying sponsors |
| | | Pink Hydrogen awareness and education is increased |
| | | Estimated monetary benefit of £5K/yr if 200K people are reached via the website |
| Environmental | Employee Environmental Training approx £100 pp | Ensures Regulatory compliance, saving on average £7000 per instance of non-compliance |
| | Environmental Educational Information (Included in marketing) | Improves general public knowledge and understanding of Pink Hydrogen as a strategy to achieve Net Zero |
| | Encouraged Pink Hydrogen Innovation (Included in marketing) | Encourages new Pink Hydrogen Businesses bringing value to the global economy via employment and efficient Net Zero technologies |

*Figure 8: Cost Benefit Analysis of Preferred Option*

# PESTLE Analysis

## Political

**How and to what degree the government intervenes in the economy or industry**

| | Global | UK | France |
|---|---|---|---|
| Policy | **Paris Climate Agreement:**<br><br>There are no strong penalties for countries failing to address climate change.<br><br>Countries should publish emissions and show active work towards reducing emissions<br><br>Commitment by most countries to keep global warming below 2C | **2008 Climate Act:**<br><br>This act, revised in 2019, commits the UK to reaching Net-Zero by 2050. | **Energy and Climate Act:**<br><br>This act adopted in 2019 is a legally binding act requiring France to reach Net-Zero by 2050. |
| | | **The Ten Point Plan for a Green Industrial Revolution:**<br><br>This plan published in 2020 lays out a ten-point plan for the UK's industrial revolution to reach Net-Zero by 2050. It is established that Hydrogen will play a large part in this industrial revolution. | **French Hydrogen Strategy:**<br><br>France's ambition is to produce 4.5GW of Hydrogen by 2030 and 8.0GW of Hydrogen by 2035 for the decolonisation of multiple sectors. |
| | | **UK Hydrogen Strategy:**<br><br>This strategy published in 2021 lays out the UK's strategy for adoption zero/low emission hydrogen do decarbonise a wind range of sectors in the UK. This includes using Pink Hydrogen. | **France & Nuclear:**<br><br>France have been leaders in the adoption of nuclear power stations. This puts France in a prime position to produce Pink Hydrogen. |
| Political Stability | Current global stability appears to be in question with a war between Ukraine and Russian and many conflicts in the Middle East. This state of global instability has put an emphasis on energy security/independence. The current war in Iran has put strain on the price of fossil fuel which could make solutions to decarbonise more appealing around the world | The UK has not seen a prime minister serve a full term since the mid 2000's and in 2026 new parties Reform UK and The Green Party are both gaining traction. Neither of these parties are pro Nuclear energy which would cause major problems for the adoption of Pink Hydrogen. | France has been seeing a steady increase in political instability for with causing difficulty when passing Net-Zero policies. |
| Trade | Countries such as Japan are looking to import large amounts of Hydrogen to help them decarbonise. Surplus Pink Hydrogen could be a potential export for companies producing it. | | |
| Tax/Funding Policies | Many countries are enacting subsidies for low carbon hydrogen making Pink Hydrogen an attractive option for companies looking for a tax break. | France is funding 4 billion Euros of subsidizes towards low carbon hydrogen. This provides opportunities for companies to adopt Pink Hydrogen | The UK is providing funding to Hydrogen projects through the Hydrogen Business Model. |

| | | Global | UK | France |
|---|---|---|---|---|
| **Economic**<br><br>**Determinants of an economy performance (affects consumer purchasing powers and supply and demand)** | Economic Growth | The global economy has been growing since the end of the economic downturn following COVID 19 however there is currently global economic instability with volatile prices and tariffs. | | |
| | Inflation Rates | | | |
| | Crude Oil Prices | Due to global conflicts and other factors, the price of crude oil is high. Prolonged high prices could help to drive Net-Zero agendas around the world. | | |

| | | Global | UK | France |
|---|---|---|---|---|
| **Social**<br><br>**Demographic characteristics of values and norms within which a business operates** | Population Growth Rate | Global population growth rate is predicted to continue decreasing according to the UN with the population shrinking beyond 2085. Population growth means increased demand on energy services | UK population growth is decreasing with the population predicted to start shrinking by 2060 according to the UN. This means energy demand will increase towards the Net-Zero 2050 target | The French population is expected to be stabilise by around 2050 according to the UN. This means energy demand will increase towards the Net-Zero 2050 target |
| | Income Levels | | | |
| | Careers, Health, Lifestyle | There is an increased global demand for engineers. This can cause issues for countries who cannot provide the incentive for home grown engineers to stay in the local job market. | Net-Zero targets create new jobs in the engineering sector however 20% of current engineers in the UK are projected to retire in the next five years taking knowledge and experience with them. This raises question around the ability for UK engineers to keep up with the growing demand and a shortage of talent. UK engineering labour market - squeezed to the limits [a]<br><br>Domestic Net-Zero projects will not only by fighting for engineers with international job market but also with other domestic sectors. | Net-Zero in France is expected to create a demand for engineers. However, there is currently a deficit of engineers in France with the demand for engineers with 40,000 new engineers entering the market a year but a requirement for 100,000. [b]<br><br>Domestic Net-Zero projects will not only by fighting for engineers with international job market but also with other domestic sectors. |

| | | | | |
|---|---|---|---|---|
| **Technological**<br>**Factors pertaining in innovation and technology and the regulations around them** | | Global | UK | France |
| | Technology Incentives | | Part of the UK's hydrogen strategy is to fund new technology for low carbon Hydrogen | Part of the France's hydrogen strategy is to fund new technology for low carbon Hydrogen |
| | Level of innovation | | Scalable solutions to produce Pink Hydrogen already exist however Solid Oxide Electrolysers are not yet ready for full scale operation which is where Pink Hydrogen will really see the benefits over other methods of production due to 20-30% efficiency increase in production | Scalable solutions to produce Pink Hydrogen already exist however Solid Oxide Electrolysers are not yet ready for full scale operation which is where Pink Hydrogen will really see the benefits over other methods of production due to 20-30% efficiency increase in production. |
| | | | EDF has produced a FEED Study for Hydrogen production facilities integrated with Nuclear Power Stations. | |
| | | | New applications for hydrogen are nearing maturity including the use of Hydrogen to power all types of heavy transport. Aviation is lagging behind ground and sea transport however there are large industry players including Airbus, Rolls-Royce and GNK all working on Hydrogen in collaboration with Easy Jet and Bristol Airport. | France is a highly developed nuclear country meaning it has many opportunities to add hydrogen production facilities to existing or new Nuclear Power stations. |
| | Public Perception | | 28% of the UK population surveyed by XXX were optimistic about the adoption of Hydrogen solutions. Additionally, it was found the awareness was the largest factor in peoples views about the adoption of Hydrogen solutions. This means that education and awareness around hydrogen is an easy way to gain public support for Hydrogen. | |
| | R&D activity | | There are R&D activities including aircraft engines running on Hydrogen based SAF. | |
| | | | R&D projects for the development of more efficient sustainable airliners | |
| | | | R&D activities for liquid storage of Hydrogen | |
| | | | R&D activities for more efficient hydrogen electrolysers | |
| | | | R&D activities for Hydrogen Fuel Cells | |
| | | | R&D activities for the development of Hydrogen based SAF. | |
| | Technological Awareness | | | |
| | Regulations | Global hydrogen regulations are under developed however there is an active effort by regulators to enable Hydrogen technology | UK hydrogen regulations are under developed however there is an active effort by regulators to enable Hydrogen technology | UK hydrogen regulations are under developed however there is an active effort by regulators to enable Hydrogen technology |

| | | | | |
|---|---|---|---|---|
| **Legal**<br>**Specific laws around the workplace** | | Global | UK | France |
| | | | Companies Act 2006: Companies within the public domain over a certian size are required to provide information on anual turnover<br><br>Climate Change Act 2008: From 2019 leagaly holds the UK to achiving net-zero by 2050 | Energy Climat Law: French law in 2019 making net-zero 2050 a leagaly binding target |
| **Environmental**<br>**The ecological aspects of the place in which a company operates.** | | Global | UK | France |
| | Global Warming | The Globe has been warming rapidly since the start of the industrial revolution due to GHG emissions | | |
| | Water | Undparadictable changes in freshwater supply due to climate change | | |
| | Air | Air is poluted with GHG emissions having an impact on health | | |
| | Loss of Biodiversity | Spechies can not adapt rapidly enough to cope with the current rate of global warming causing a loss in biodiversity | | |

*Figure 9:PESTLE Analysis*

**Assumptions:**

Initial forecasting based on securing one member per month
Years 1-6 are not expected to secure memberships with 'major' companies i.e. turnover > £500M
Years 6+ are anticipated to secure at least one major company
Growth anticipated as the hydrogen market matures
Growth anticipated due to publicity success
Growth anticipated due to accreditation credibility increase
Growth anticipated as Pink Tank matures and scales to accommodate a growing pink hydrogen market
Base case generated from average of micro, small, medium, and large companies in the middle of the price brackets
Worst case generated from average of micro, small, medium, and large at the lower end of the price brackets
Best case generated from average of micro, small, medium, and large at the higher end of the price brackets
All estimates are conservative, even the best case.

*Figure 10: Assumptions for Revenue Forecasting.*

| Year | Number of Accredited Members | Average Fee (£) | Revenue (£) |
|---|---|---|---|
| 1 | 12 | 5,250 | 63000 |
| 2 | 30 | 5,250 | 157500 |
| 3 | 60 | 5,250 | 315000 |
| 4 | 100 | 5,250 | 525000 |
| 5 | 150 | 5,250 | 787500 |
| 6 | 210 | 8,250 | 1732500 |
| 7 | 300 | 8,250 | 2475000 |
| 8 | 400 | 8,250 | 3300000 |
| 9 | 500 | 8,250 | 4125000 |
| 10 | 600 | 8,250 | 4950000 |
| **WORST CASE** | | | |

*Table 3: Revenue Forecasting (Worst Case)*

| Year | Number of Accredited Members | Average Fee (£) | Revenue (£) |
|---|---|---|---|
| 1 | 12 | 9,250 | 111000 |
| 2 | 30 | 9,250 | 277500 |
| 3 | 60 | 9,250 | 555000 |
| 4 | 100 | 9,250 | 925000 |
| 5 | 150 | 9,250 | 1387500 |
| 6 | 210 | 17,400 | 3654000 |
| 7 | 300 | 17,400 | 5220000 |
| 8 | 400 | 17,400 | 6960000 |
| 9 | 500 | 17,400 | 8700000 |
| 10 | 600 | 17,400 | 10440000 |
| **BEST CASE** | | | |

*Table 4: Revenue Forecasting (Best Case)*

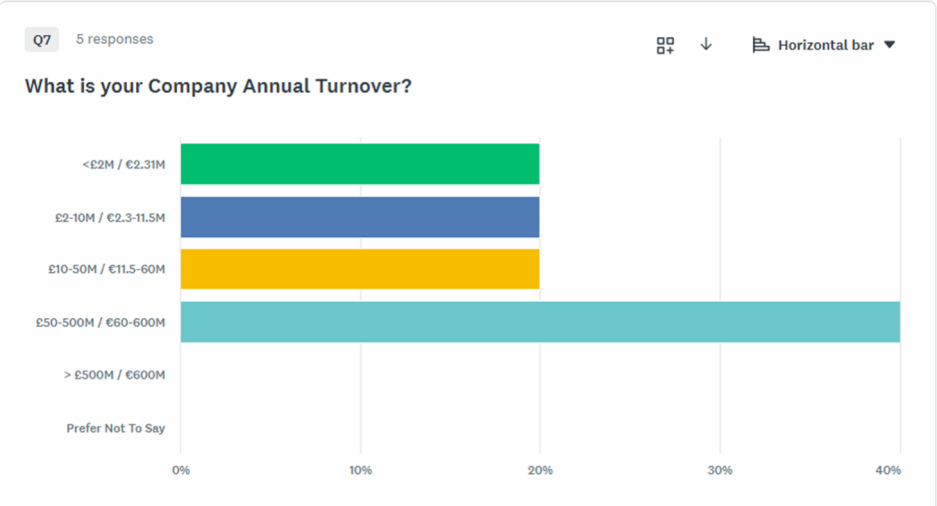



*Figure 11: Section from Online Membership Application Survey*

| Cost Category | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Year 6 | | Year 7 | | Year 8 | | Year 9 | | Year 10 | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Minimal (3 Staff) | Optimal (7 Staff) | Minimal (4 Staff) | Optimal (7 Staff) | Minimal (7 Staff) | optimal (9 Staff) | Minimal (9 Staff) | Optimal (11 Staff) | Minimal (15 Staff) | Optimal (17 Staff) | Minimal (17 Staff) | Optimal (20 Staff) | Minimal (20 Staff) | Optimal (22 Staff) | Minimal (21 Staff) | Optimal (23 Staff) | Minimal (26 Staff) | Optimal (29 Staff) | Minimal (35 Staff) | Optimal (39 Staff) |
| Salaries (incl payrises) | 135000 | 315000 | 180000 | 315000 | 332500 | 427500 | 427500 | 522500 | 750000 | 850000 | 850000 | 1000000 | 1000000 | 1100000 | 1050000 | 1150000 | 1300000 | 1450000 | 1750000 | 1950000 |
| Laptops | 4500 | 10500 | 7500 | 10500 | 10500 | 13500 | 13500 | 16500 | 22500 | 25500 | 25500 | 30000 | 30000 | 33000 | 31500 | 34500 | 39000 | 43500 | 52500 | 58500 |
| Website | 20 | 20 | 20 | 20 | 20 | 20 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 | 50 |
| Marketing Budget | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 15000 | 20000 | 20000 | 20000 | 20000 | 20000 | 20000 | 25000 | 25000 | 25000 | 25000 | 25000 | 25000 | 25000 |
| mjedium Office (not London) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37980 | 43044 | 43044 | 50640 | 50640 | 55704 | 53172 | 58236 | 65832 | 73428 | 88620 | 98748 |
| Monitors / general office equipment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4500 | 5100 | 5100 | 6000 | 6000 | 6600 | 6300 | 6900 | 7800 | 8700 | 10500 | 11700 |
| | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Sum | 154,520 | 340,520 | 202,520 | 340,520 | 358,020 | 456,020 | 456,050 | 559,050 | 835,030 | 943,694 | 943,694 | 1,106,690 | 1,106,690 | 1,220,354 | 1,166,022 | 1,274,868 | 1,437,682 | 1,600,678 | 1,926,670 | 2,143,998 |
| Below Base Case Revenue | | | | | | | | | | | | | | | | | | | | |
| Above Base Case Revenue | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | |
| Surplus / Loss | -£70,520 | -£256,520 | £7,480 | -£130,520 | £61,980 | -£36,020 | £243,950 | -£140,950 | £784,970 | £676,306 | £1,324,306 | £1,161,310 | £2,133,310 | £2,019,646 | £3,153,978 | £3,045,132 | £3,962,318 | £3,799,322 | £4,553,330 | £4,336,002 |

*Figure 12: Revenue and Surplus Accounting*

| Risk and Opportunity Assessment | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Risk Identification | | | Financial Consequence Sum = | | -£900,000.00 | Impact Assessment | | | Financial Consequence Sum = | £215,000.00 | Mitigated Impact Assessment | | | |
| ID | Title | Description | Classification | Mitigation Strategy | Cost (+£ = profit) | Likelihood | Impact Level | Risk Score (Likelihood x Severity) | Mitigation Description | Target Cost (+£ = profit) | Likelihood | Impact Level | Risk Score (Likelihood x Severity) | |
| OP.01 | New Government Net Zero Hydrogen Fund | The UK government has funding available for organisations that will assist the Hydrogen Strategy goal of 10GW of low-emission hydrogen by 2030 | Opportunity | Boost | £100,000.00 | 3 | -3 | -9 | Boosted by researching and identifying similar funding schemes both in and outside the UK for new Net-Zero Nuclear Hydrogen businesses | £150,000.00 | 4 | -3 | -12 | |
| OP.02 | Growing interest In Low-Carbon Hydrogen as a Net Zero Solution | The French and British government, amongst others, have both identified low-emission hydrogen as a key player in decarbonising industries that have been historically difficult to do so. This could warrant boosted governmental and international financial and social support | Opportunity | Boost | £100,000.00 | 3 | -3 | -9 | Boosted by researching and identifying similar funding schemes both in and outside the UK for new Net-Zero Nuclear Hydrogen businesses | £150,000.00 | 4 | -3 | -12 | |
| OP.03 | Projected Market Expansion | The Pink Hydrogen market is expected to have a compound annual growth rate of 25.7% from 2026 to 2023, driven by Net-Zero efforts. | Opportunity | Boost | £150,000.00 | 4 | -4 | -16 | maximised by early market entry, strong policy alignment, and positioning Pink Tank as a standard within a rapidly expanding hydrogen market. | £200,000.00 | 4 | -5 | -20 | |
| R.01 | International Scaling Hiccups | Movement from a UK based organisation across borders may impact abilities to launch into new markets. There may also be additional regulatory challenges | Risk | Reduce | -£50,000.00 | 3 | 2 | 6 | Discuss and collaborate directly with international companies to ensure strong working relationships are maintained and any issues avoided or managed | -£10,000.00 | 1 | 1 | 1 | |
| R.02 | Ineffective Marketing Strategy | A poor marketing strategy could cause us to lose our marketing budget of 25K a year and fail to reach partners and gain public interest | Risk | Reduce | -£250,000.00 | 3 | 5 | 15 | Likelihood reduced via staged investment, targeted campaigns, and performance monitoring, ensuring the £25k budget is used efficiently | -£100,000.00 | 1 | 5 | 5 | |
| R.03 | lure to Comply with relevant Regulatory Boc | Poor management and governance could result in compliance breaches which could cost Pink Tank in lawsuits and reputation | Risk | Avoid | -£500,000.00 | 4 | 5 | 20 | Training issued to all employees and associates on regualtory requirements will prevent accidental breaches | -£100,000.00 | 1 | 5 | 5 | |
| R.04 | Failure to Secure Partnerships | Pink Tank fails to secure partnerships with new and existing organisations | Risk | Reduce | -£200,000.00 | 4 | 4 | 16 | Mitigated by targeting industry stakeholders early on to help build long-term relationships, maintaining them via our adoption incentives to bring new business and PHI credit discounts. Improving our image by being not-for-profit prevents organisations from doubting our authenticity or intent | -£100,000.00 | 2 | 4 | 8 | |
| OP.04 | Increase in Funding and Projects into Nuclear Power | The infrastructure needed, e.g. SMRs, to support Pink Tank are being met with growing support and drive to achieve net zero targets. | Opportunity | Boost | £200,000.00 | 3 | -5 | -15 | Target partnerships with companies investing in SMRs e.g. Rolls Royce and EDF. | £300,000.00 | 4 | -5 | -20 | |
| R.06 | Pink Hydrogen fails to compete with other forms of Hydrogen | Pink Hydrogen fails to encourage further growth in the hydrogen market due to competition with blue, green and grey hydrogen | Risk | Reduce | -£250,000.00 | 2 | 5 | 10 | reduced by differentiating pink hydrogen's reliability and targeting industries unsuitable for electrification, while improving cost competitiveness and policy support, in particular against GHG emitting grey hydrogen. | -£150,000.00 | 2 | 3 | 6 | |
| R.07 | Negative associations with Nuclear Power | Current attitudes on Nuclear Power compared to competitive renewables are poor. A negative association could halter interest and choke potential investments | Risk | Reduce | -£100,000.00 | 4 | 3 | 12 | Educational programmes and marketing campaigns aim to improve the general perception of nuclear power and the role it plays in achieving net zero | -£50,000.00 | 1 | 3 | 3 | |
| R.08 | Weak Accreditation System | If our accreditation system is deemed weak, the public and potential partners, users and investors could lose trust | Risk | Reduce | -£100,000.00 | 4 | 5 | 20 | Mitigated by implementing rigorous, independently verified accreditation standards in alignment with recognised regulatory bodies, ensuring strong credibility and stakeholder trust. Regular updates and improvements will be made, with our users kept permanently in the loop with communications. | -£75,000.00 | 2 | 3 | 6 | |

*Figure 13: Risk and Opportunity Matrix*

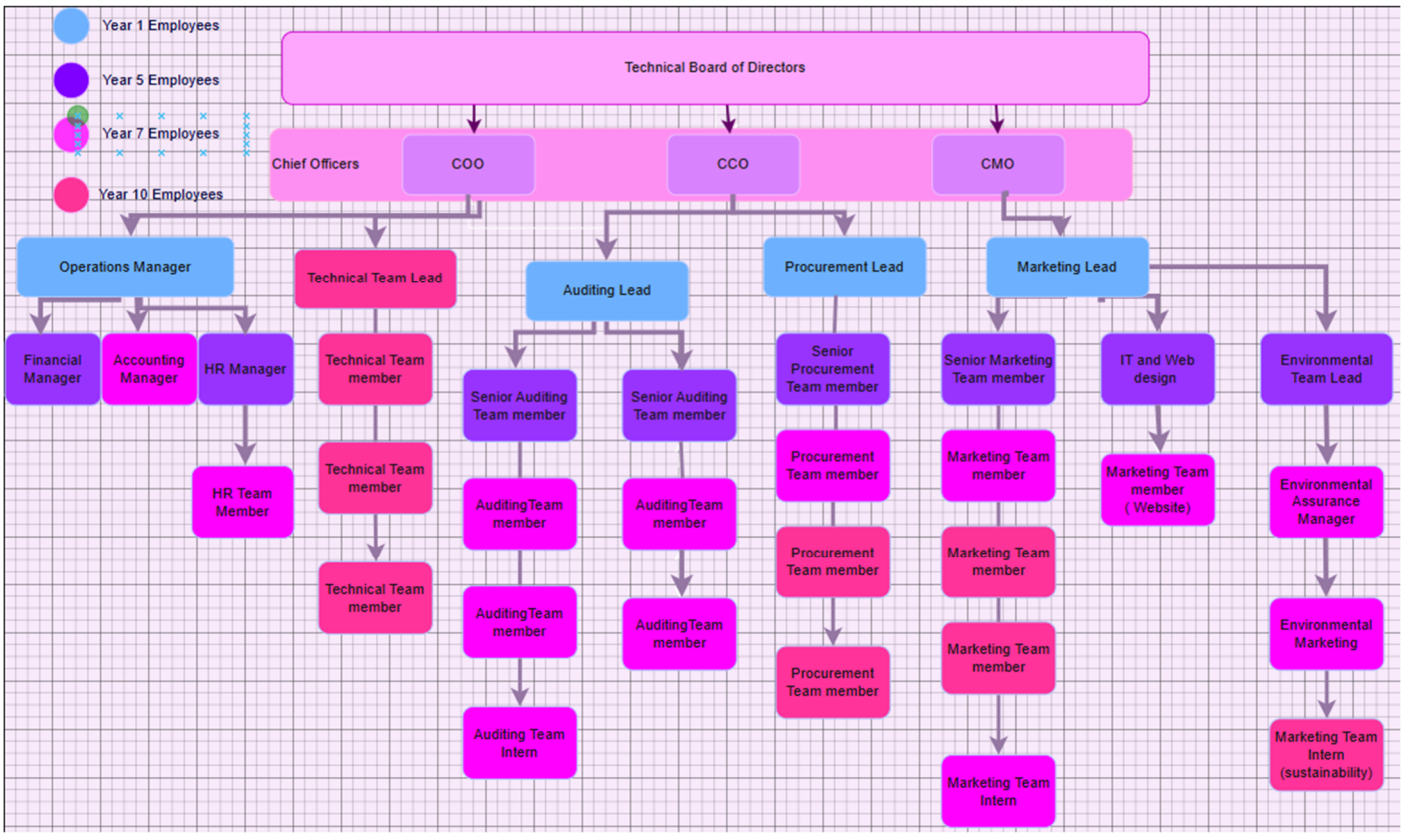



*Figure 14: Example ORG Chart of Critical Employees hired Per Year*

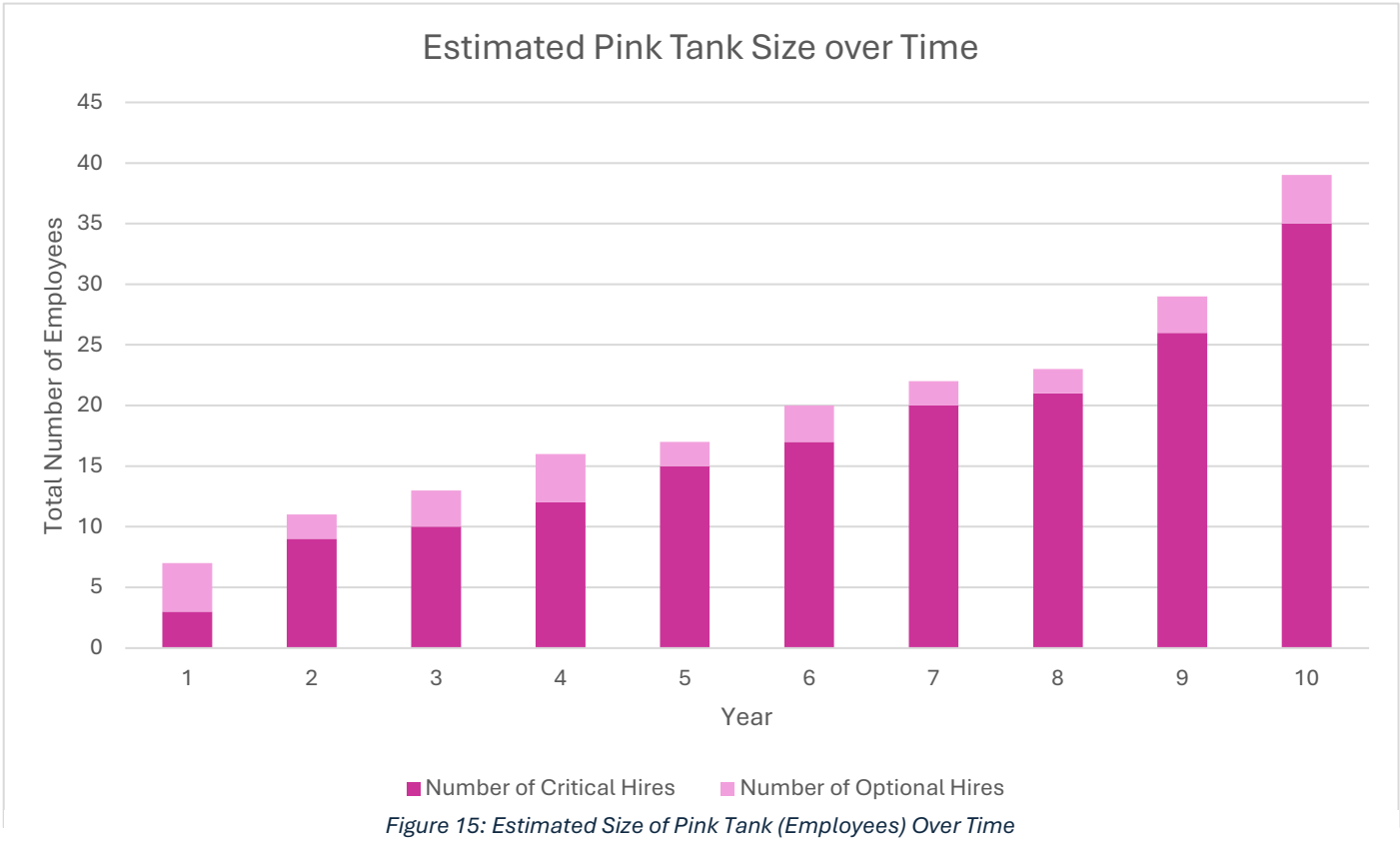



*Figure 15: Estimated Size of Pink Tank (Employees) Over Time*

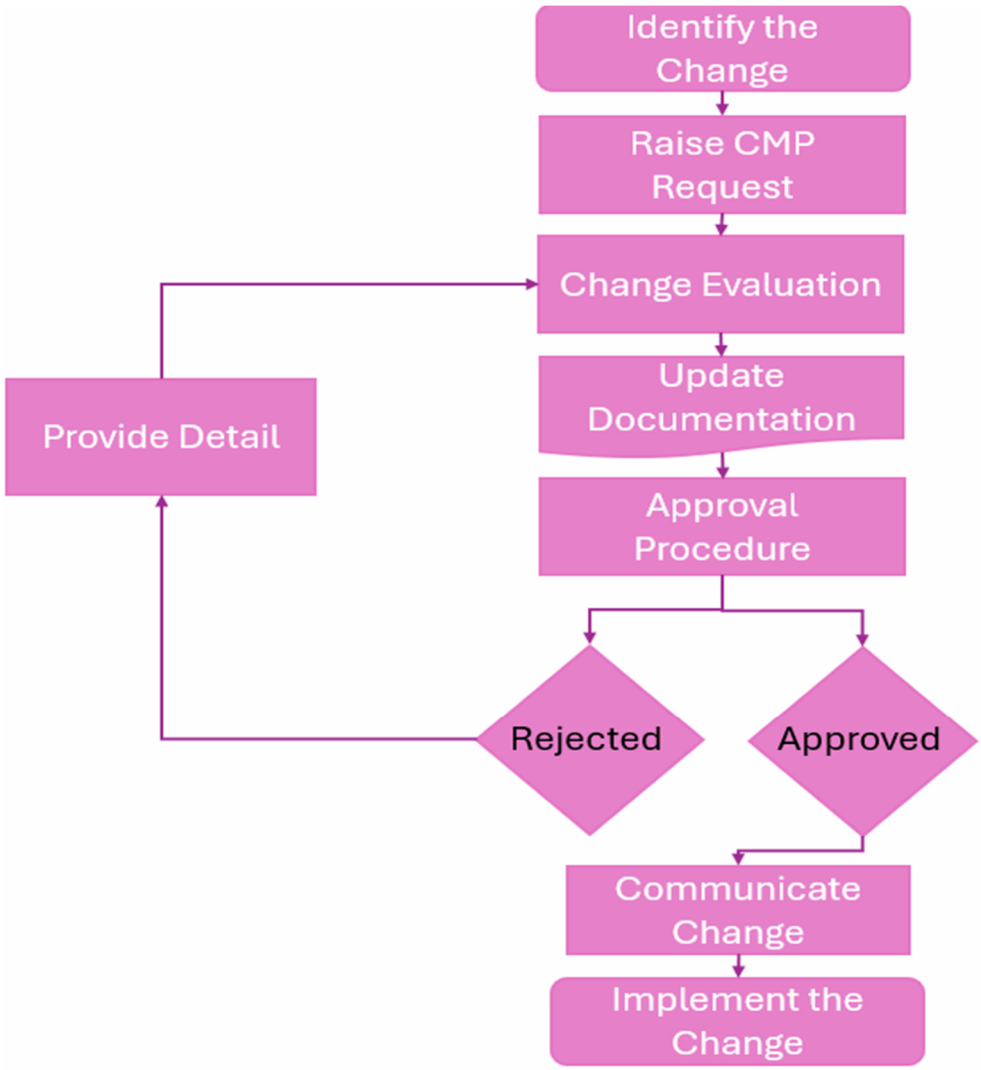



*Figure 16: Change Management Procedure (CMP) Process*

| | Risk Management | Project Management | Time Management | Regulatory / legislatory Knowledge (UK) | Analytical abilities | Data analysis | Strategic Thinking/ Problem solving | Accounting / Financial Reporting | Technological Proficiency | Oral & Written Communication | Presenting | Working under pressure | Creativity | Collaboration |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Finance Manager | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | | 2 |
| Accounting Manager | 3 | 2 | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | 2 | 1 | | 2 |
| Technical Project Manager | 3 | 3 | 3 | 3 | 2 | | 3 | 2 | 1 | 2 | 2 | 2 | 2 | 2 |
| Technical Team Member | 1 | 1 | 1 | 2 | 2 | | 2 | | 1 | 2 | 1 | 1 | 2 | 2 |
| Auditing Team Lead | 3 | 3 | 2 | 3 | 2 | 3 | 2 | 2 | 1 | 3 | 2 | 2 | | 2 |
| Audit Team Member | 1 | 1 | 1 | 2 | 2 | 2 | 1 | | 1 | 2 | 1 | 1 | | 2 |
| Procurement Team Lead | 3 | 3 | 2 | 3 | 2 | 3 | 3 | 2 | 1 | 3 | 2 | 2 | 1 | 2 |
| Procurement Team Member | 2 | 1 | 1 | 2 | 2 | 2 | 2 | | 1 | 2 | 1 | 1 | 1 | 2 |
| Marketing Team Lead | 3 | 3 | 2 | 3 | 2 | 3 | 1 | 2 | 3 | 3 | 2 | 2 | 3 | 2 |
| It/ Web Design | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 3 | 3 |
| Marketing Team Members | 2 | 1 | 1 | 1 | 2 | 3 | 1 | | 3 | 3 | 2 | 1 | 2 | 2 |
| Marketing Intern | 1 | 1 | 1 | 1 | 2 | 1 | 1 | | 2 | 2 | 1 | 1 | 2 | 2 |
| Environmental Team Lead | 3 | 3 | 2 | 3 | 2 | 2 | 1 | 1 | 1 | 2 | 2 | 2 | 1 | 2 |
| Sustainability Marketing Manager | 3 | 3 | 2 | 1 | 2 | 3 | 1 | 1 | 3 | 1 | 2 | 2 | 3 | 2 |
| Environmental Assurance Manager | 3 | 2 | 2 | 3 | 2 | 2 | 3 | 1 | 1 | 1 | 2 | 2 | 1 | 2 |
| Marketing Team Member (Sustainability) | 2 | 1 | 1 | 1 | 2 | 3 | 1 | | 2 | 3 | 1 | 1 | 2 | 2 |
| HR manager | 1 | 3 | 1 | 3 | 1 | 2 | 2 | 1 | 2 | 2 | 2 | 2 | 1 | 2 |
| HR team member | 1 | 1 | 2 | 1 | 1 | 2 | 2 | | 2 | 2 | 1 | 1 | 1 | 2 |

5 Expert
4 Advanced Ability
3 Good Ability
2 Intermediate Ability
1 Basic Ability
Skill Not Required

*Figure 17: Skills Matrix*

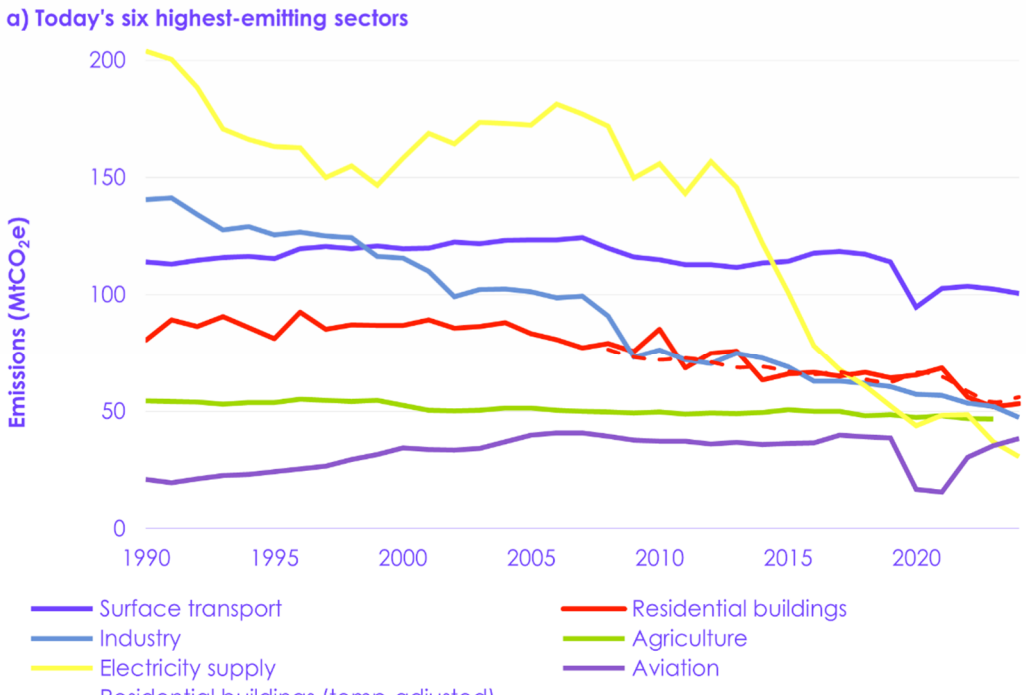



*Figure 18: Highest Emitting Sectors [25]*

| Level | Aim | Key Criteria | Non-mandatory Criteria | Verification Approach | Pricing Per Year (Capped at 0.01% of Turnover) | | Benefits |
|---|---|---|---|---|---|---|---|
| | | | | | Company Size (Turnover/year) | Pricing Bracket/year | |
| Tier 0: Free Membership | Measure levels of intent | Fills in online form | N/A | Online questionnaire | £0 / €0 Regardless on Company Size | | Access to Pink Tank Accreditation Services |
| Tier 1: Entry Level Accreditation | Encourage and incentivise early engagement | Demonstrates intent to adopt/help others to adopt Pink Hydrogen, | Internal decarbonisation targets | Self declaration with review<br>Submitted strategies and baseline data are reviewed and checked for feasibility and are subject to random audit sampling to maintain integrity throughout the Tier 1 stage | <£2M / €2.31M | £2K / €2.31K | Access to Pink Tank network |
| | | Documented Pink Hydrogen strategy with timelines, targets and area(s) of application | participation in feasibility studies or pilot plans | | £2-10M / €2.3-11.5M | £3-5K / €3.6-6K | matchmaking services |
| | | Committed to disclose baseline emissions and current fuel / energy use profile in accordance with ISO 14064 and the GHG protocol **(Suppliers/Consumers ONLY)** | existing engagement with pink hydrogen suppliers and/or producers | | £10-50M / €11.5-60M | £6-10K / €7.2-12K | Public recognition and marketing exposure as an accredited member |
| | | Is a Registered Pink Tank free Member | | | £50-500M / €60-600M | £10-20K / €12-24K | Guidance, frameworks and communications |
| | | | | | >£500M / €600M | £20K-50K / €24K - 60K | |
| Tier 2: Bronze Accreditation | Support and incentivise the transition from strategy to pilot implementation | Evidence of direct participation in pilot-based Pink Hydrogen adoption | Plans to move from a pilot scheme towards consistent use | Hybrid Verification Approach<br>Baseline emissions are self reported and reviewed for feasibility<br>Documented evidence is required e.g. pilot reports<br>Reviews against baseline found in Tier 1 (if applicable)<br>Subject to random audit sampling to maintain integrity throughout the Tier 2 stage | <£2M / €2.31M | £2K / €2.31K | Official Bronze Pink Tank accreditation |
| | | Evidence of measurable activity e.g. quanitity of hydrogen used (kg) or produced (kg/hr) **(Suppliers / Consumers ONLY)** | Projected to maintain pink hydrogen investment | | £2-10M / €2.3-11.5M | £3-5K / €3.6-6K | Public recognition and marketing exposure as an accredited member |
| | ocussed on participation and progression, not volum | Initial emissions tracking compared to tier 0 **(Suppliers / Consumers ONLY)** | | | £10-50M / €11.5-60M | £6-10K / €7.2-12K | |
| | | Committed to disclose baseline emissions and current fuel / energy use profile in accordance with ISO 14064 and the GHG protocol | Projected to show evidence of a measurable emissions reduction | | £50-500M / €60-600M | £10-20K / €12-24K | Eligible for Pink Tank grants |
| | | | | | >£500M / €600M | £20K-50K / €24K - 60K | As well as all other Tier 1 benefits |
| Tier 3: Silver Accreditation | Support the Scaling adoption of pink hydrogen use across operations | Evidence of Direct participation in Routine hydrogen use in operations | Projected to maintain pink hydrogen investment | Stronger Verification Approach<br>Documented operational data required including hydrogen use records and self-reported baseline emissions which are checked for feasibility<br>Subject to random audit sampling to maintain integrity throughout the Tier 3 stage | <£2M / €2.31M | £2K / €2.31K | Official Silver Pink Tank accreditation |
| | | Participation in a Quantifiable increase from tier 2 activity, measurable in hydrogen consumption, production or % of operations using pink hydrogen | Plans to increase hydrogen use to a more significant span of operations | | £2-10M / €2.3-11.5M | £3-5K / €3.6-6K | |
| | ocussed on participation and progression, not volum | Direct Participation in a demonstrated emissions reduction compared to baseline emissions in accordance with ISO 14064 and the GHG protocol | | | £10-50M / €11.5-60M | £6-10K / €7.2-12K | Increased marketing exposure and brand recognition |
| | | Evidence of strategic investment or commitment, e.g. infrastructure planning and hydrogen partnerships | Projected to achieve consistent and verified emission reductions | | £50-500M / €60-600M | £10-20K / €12-24K | Stronger position for ESG reporting, Net-Zero KPI reporting, investor confidence and customer perception |
| | | Clear transition from Pilot-sized study **(Suppliers / Consumers ONLY)** | | | >£500M / €600M | £20K-50K / €24K - 60K | All other Tier 2 benefits |
| Tier 4: Gold Accreditation | Rewards organisations that have achieved advanced pink hydrogen progress and integration | Evidence of participation in a significant hydrogen integration across operations | Projected to achieve near or full hydroegn integration | Robust Verification Approach<br>Mandatory third party audit and verification<br>full emissions reporting aligned with GHG protocol and ISO 14064<br>Documented hydrogen use data, emissions reductions data, both with supporting evidences<br>Subject to random audit sampling to maintain integrity | <£2M / €2.31M | £2K / €2.31K | Official old Pink Tank accreditation |
| | | Verified substantial emissions reductions **(Consumer / Suppliers ONLY)** | | | £2-10M / €2.3-11.5M | £3-5K / €3.6-6K | High-level marketing exposure and brand recognition |
| | Drive market demand signals for pink hydrogen | Evidence of supply chain impacts e.g. engagement with suppliers and/or logistics partners | Projected to demonstrate innovation and/or infrastructure leadership | | £10-50M / €11.5-60M | £6-10K / €7.2-12K | |
| | | Demonstrated long term commitment to pink hydrogen | | | £50-500M / €60-600M | £10-20K / €12-24K | Recognition as an industry leading pink hydrogen organisation |
| | Drive large scale reduction in emissions | Demonstrated particpation in emissions reduction compared to baseline emissions in accordance with ISO 14064 and the GHG protocol | Projected to have a system-level decarbonisation impact | | >£500M / €600M | £20K-50K / €24K - 60K | Strong advantage for ESG reporting, Net-Zero KPI reporting, investor relations and customer perceptions |
| | | | | | | | All other Tier 3 benefits |

*Figure 19: Accreditation Tiers*

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