PART 2 – CONFIDENTIAL FACTS AND ADVICE

MD2032
Title: Growing Places Fund – Tempus Energy

Information may have to be disclosed in the event of a request under the Freedom of Information Act 2000. In the event of a request for confidential facts and advice, please consult the Information Governance team for advice.

This information is not for publication until the stated date, because:

This report contains information:

1. relating to Tempus Energy Ltd's financial situation and their and Tempus Technology Limited's, funding terms, security, intellectual property rights in certain products and business model going forward, the disclosure of which may prejudice the borrower's commercial interests adversely affecting its ability to work with investors and other organisations generally and the GLA's commercial interests, impeding its ability to negotiate a range of interest rates and security requirements across the spectrum of the GPF programme and optimise returns on investment; and

2. on an investor that has withdrawn their funding offer from the project the disclosure of which may prejudice any further fund raising (as investors tend to become nervous when hearing of the withdrawal of investment).

Date at which Part 2 will cease to be confidential or when confidentiality should be reviewed: Confidentiality should be reviewed at 31st March 2021 which is the end of the term of the loan agreement

Legal recommendation on the grounds of keeping the information confidential:

In the event of any request for access to the information contained in this document under section 1 of the Freedom of Information Act 2000 ("the Act"), it is considered that access can be denied on the basis that the disclosure of such information would prejudice the GLA's and the proposed borrower's commercial interests and therefore, is covered by the exemption under section 43 of the Act.

Section 1 of the Act creates the general right of access, which provides that any person making a request for information to a public authority is entitled:

- to be informed in writing by the public authority whether it holds information of the description specified in the request; and

- if that is the case, to have that information communicated to him/her.

Part II of the Act contains a number of exemptions from disclosure for certain classes of information. In particular, section 43 of the Act provides that information is exempt information if its disclosure under the Act would, or would be likely to prejudice the commercial interests of any person (including the public authority holding it). The paragraph above states that the information is considered commercially sensitive as its release could detrimentally affect the:

- Tempus Energy Ltd's and Tempus Technology Ltd's ability to compete upon the market in which they are engaged and leverage third party investment effectively;

- GLA's ability to negotiate optimal terms of the novation, variation and security arrangements; and

- GLA's ability to secure a return on its investment.

The section 43 exemption is a qualified exemption and its use is therefore, subject to a public interest assessment.

Public Interest Assessment

At present, on balance, it is considered that the public interest is best served if the information is not disclosed at this point. Disclosure by the GLA would be likely to have a detrimental effect on the:

- GLA's, Tempus Energy Ltd's and Tempus Technology Ltd's commercial interests and the delivery of the proposed project;
- GLA's delivery of a project which promotes economic development and wealth creation in Greater London' and
- GLA's ability to manage prudently public funds.

The eligibility of these exemptions should be reassessed in the event of an freedom of information request for this information as the level of sensitivity will change over time and different circumstances may alter the arguments in favour of non-disclosure.

Legal Adviser - I make the above recommendations that this information should be considered confidential at this time

Name: **Stephen Fernandes-Owen, TfL Legal** **Date: 15 September 2016**

Once this form is fully authorised, it should be circulated with Part 1.

Confidential decision and/or advice:

1. Executive Summary

1.1. Tempus Energy Ltd informed the GLA in July 2016 that it is at risk of becoming insolvent which would result in the GLA having to write off its investment of £250,000. Officers have reviewed evidence provided by the company on this issue, presented initial options to the London Enterprise Panel Delivery Board (LEP DB) for comment and sought further detail on preferred options. A way forward has been identified to convert the loan to a repayment from profits model and novate the GPF funding agreement to Tempus Energy Technology Ltd.

2. Decision

2.1. That the Mayor approves for the GLA to retain security against IP and relinquish its security over certain capital assets (equipment of approximately £49k in value when valued in 2014) to help the company transition to their Tempus Energy Technology Ltd model.

2.2. That the Mayor approves the novation, variation (in line with section 1.1 above) and entry into security arrangements with Tempus Energy Technology Ltd.

3. Issue that has arisen and evidence

3.1. Tempus Energy Ltd informed the GLA in July 2016 that it was at risk of becoming 'balance sheet insolvent' and approached the GLA to explain that this was the backdrop result of the Brexit decision and a reluctance of investors to commit additional funding. The liability on their books to repay the GPF loan sum and interest is also a factor.

3.2. The Tempus group has proposed the sale of its electricity supply business ('Tempus Energy Supply Ltd') and the writing off of the GPF loan or conversion of the loan to a different form will render the Tempus Energy Ltd and the wider group firmly solvent. This will also enable the project to deliver outputs against our investment, and enable Tempus to conserve 10 jobs (including 4 apprentices) based in London. To that end, the CEO opened up discussions with the GLA about options for converting the loan to remove the GLA as a creditor from their books and is in advanced negotiations with an entity to buy the electricity supply business (Tempus Energy Supply Ltd).

4. Evidence reviewed

Financial difficulties in 2015

4.1. Early concerns were raised about the financial health of Tempus Energy Ltd in the summer of 2015 when it requested a re-scheduling of their first interest payment due in November, citing that they would not be in a position to pay at that point despite the modest sum £13k. An agreement was reached, but signals that the company was experiencing financial difficulties re-surfaced when a late payment was made and it was seeking further cash injections.

4.2. As part of the evidence collating exercise the following have been reviewed: (i) the current management account information for the Tempus group of companies (including Tempus Energy Technology Ltd), (ii) evidence to confirm the impact of the Brexit decision and (iii) the business's proposal for salvaging Tempus Technology[1] and supporting income and expenditure projections.

Current management accounts

4.3. These showed the following:

- In the 15 months to the end of June the group has made losses of £3.6 million. There was a gross deficit of £0.1 million, but this was before overheads and other costs.
- The largest overhead was staffing of £2.6 million and the business has not been generating enough turnover to meet any of these costs. Although start-up losses could be expected at an early stage of development, the scale of the losses over such a short period is unsustainable and the group could only be kept afloat by further investor injections of cash.
- The group still has equity funds of £0.8 million, but any value is held within Tempus Energy Technology Ltd and Tempus Energy Ltd has negative equity of £0.6 million.
- Tempus Energy Ltd has stated that they it also has contingent liabilities of £0.5 million.
- That an agreement with the parent company (Tempus Energy Technology Ltd) is a stronger position for the GLA than with Tempus Energy Ltd. The projected total equity of Tempus Energy Technology Ltd would be £2 million.

Brexit and challenging investment environment

[1] In terms of salvaging the technology company, the intention is for Tempus to licence out the technology internationally through the technology business; this would generate the revenue for the company and the model is in line with a key element of how the company were trying to streamline their focus in the April 2016 when they restructured.

4.4. Tempus Energy Ltd closed their 'Series A' fundraising in late November 2015 at £3.78m. It was driven by high-net worth individuals, with an existing single shareholder putting in £1 million and a new investor seeking to invest £2 million.

4.5. Tempus Energy Ltd have outlined that the impact of Brexit on it has been profound and that due to the impact of a key 3rd party investor withdrawing their (pre-due diligence) offer of funding they are currently at risk of becoming insolvent. Tempus Energy Ltd provided evidence, including confidential correspondence, to support this statement. This included:

- Evidence that Tempus group reached the stage of a signed Heads of Terms with an investor on 23rd May 2016 for a £2 million share in the Tempus Energy Technology Ltd arm of the group (subject to due diligence), and evidence that in June 2016 that same investor then withdrew prior to signing the Share Purchase Agreement following on from the announcement of Brexit. The investors correspondence clearly states that their reasoning was: 'Due to the impact of Brexit on their businesses'; and that 'for the avoidance of doubt, (they) have been thoroughly satisfied with the due diligence on Tempus Energy Ltd to date, but Brexit has had a significant impact both on the investment climate in the UK and the economy at large'.
- Tempus Energy Ltd followed up with their 'warm pipeline' of investors immediately on having the news that their £2 million 3rd party investor was withdrawing, their warm pipeline stated they were also in a position of not currently investing in the UK energy sector. Evidence was provided to demonstrate this.

<u>Salvaging Tempus Technology</u>

4.6. The core business approach of Tempus Energy Technology Ltd moving forwards is for the company revenue model to be underpinned by the Tempus proprietary price prediction technology. Potential technology customers under a licencing model of Tempus Energy Technology Ltd include independent distribution network operators, large industrial or commercial customers and independent electricity suppliers. As a licencing model is being adopted by Tempus Energy Technology Ltd the technology can be rolled out by the business cost effectively with lean organisation (in 2016/17 with 10 staff, including apprentices) and the business will leverage existing relationships they have formed in recent years to establish a pipeline of customers. Ongoing business development to date has created a range of opportunities for this Tempus Energy Technology Ltd licencing model, the details of which are included in section 6.1 below.

<u>Business plan</u>

4.7. Officers from the Environment team reviewed the business plan for Tempus Energy Technology Ltd and noted that the licensing model they are proposing appears viable, but that it comes with a risk that it will not work. Risks and mitigations associated with this are understood in section 4.1 of Part 1 of this report. To that end, as the risk is a moderate one, they advise that the GLA try to remain as closely attached to the IP (algorithm) as possible as this is where the money will lie in the instance the company's licensing model is not successful. The Environment team noted that the predictive modelling process that Tempus Energy Technology Ltd are using has become better understood over the last few years and is now cropping up in a range of spaces (not just energy), but that Tempus Energy Technology Ltd have very much been a forerunner in this space.

4.8. The Tempus group set out financial forecasts for a three year period (2016/17 – 2018/19) in their Tempus Energy Technology Ltd business proposal highlighting the net profits they are projecting during this window. The financial business plan is considered very optimistic, and the key consideration is whether sales revenues could be increased from £0.4 million in 2016-17 to £1.5 million in 2017-18 and £6 million in 2018-19. Experience would suggest that there is a high risk that there could be a shortfall or delay in achieving this given the scale of losses to date compared to Tempus' original projections. To that end, this Mayoral Decision is seeking approval to have the flexibility to vary the repayment profile within the five year longstop period to accommodate for revenue building more slowly than forecast. And, as per the above, the GLA are remaining closely attached to the IP through security should the Tempus Energy Technology Ltd business model not work.

4.9. The business plan suggests outputs between 2016/17 – 2018/19 will be 3 batteries deployed into developments in London, 13 jobs created, 7 apprentices created and reduction in CO_2 emissions (annual figures will be pinned down once Tempus have finalised their tool to quantify this emissions saving). Included in these outputs is maintaining 6 staff and 4 apprentices from the current business.

4.10. The Supply Energy arm of the business has not been significantly profitable to date. As such, Tempus are selling that arm of the company off (expected price £203,000). The company is partially sold (£153,000 sold to date), with a further £50,000 due to sell.

5. Tempus Imbalance Predictor

5.1. The Tempus Imbalance Predictor is a short term forecast for the Net Imbalance Volume (NIV) between supply and demand in the UK electricity market. The UK National Grid publishes a forecast at 12:00 for the day ahead and updates every half hour. This forecast has limited accuracy and fails to account for a number of factors that can drive imbalances in the market. The value of NIV forecasting has increased since the introduction of single cash out on 5th November 2015. The Tempus Imbalance Predictor uses machine learning algorithms with recurrent neural networks to predict future values of NIV from historical and future data. The forecast is run every half hour as new data is published by National Grid. Tempus' imbalance predictor machine learning focuses on the development of their own computer programs which can teach themselves to grow and change when exposed to new industry data. Fundamentally the business model of licencing this Tempus Imbalance Predictor' out to energy supplier companies internationally will allow users to benefit directly in cost savings from understanding and shifting their usage patterns to match price fluctuations.

6. Business development

6.1. Based on the business proposal provided for Tempus Energy Technology Ltd, ongoing business development has created the following opportunities. The GLA will receive more details on how these are being progressed when a more detailed programme becomes available from Tempus Energy Technology Ltd towards the end of October 2016:

- Largest Independent Distribution Network Operators (IDNO) interested in battery management
- Large port operator interested in battery management
- Scandinavian utility interested in consulting & imbalance price prediction
- Two independent suppliers interested in imbalance price prediction & management
- US utility interested in UK & US imbalance price prediction
- German utility interested in German price prediction & battery management

7. Options for repayment

7.1. Six options have been considered by the LEP Delivery Board: (1) do nothing; (2) restructure repayment of current GPF repayments; (3) write off investment and release security; (4) call on our security; (5) adopt a repayment from profits model; and (6) conversion to equity.

7.2. Option 5 and 6 are preferred by LEP Delivery Board members as they felt both would diminish the likelihood of insolvency (by removing the GLA as a creditor), enable some jobs to be retained and improve the possibility of the GLA receiving a financial return. In the conversion to equity scenario, Tempus Energy Ltd would convert the loan value plus outstanding interest to a GLA ordinary share in its parent company, Tempus Energy Technology Ltd. This option provides the GLA with the potential to realise greater value as a profitable sale could deliver significantly more than Option 5 should the business perform well, however it exposes the GLA to potential risks associated with being a shareholder in a company. The repayment from profits option is simpler to structure and arrange (which is of particular relevance given this is a comparatively small investment for GPF) and when used in conjunction with the retention of security it reduces risks further. On the basis of the information, it is recommended that option 5 is pursued (repayment from profits).

7.3. The other five options listed above were discounted for one or more of the following reasons: the project fails / the business becomes insolvent and the outputs are not be delivered / the loan continues to be a liability impacting upon Tempus Energy Ltd's solvency / the option does not provide the opportunity for the GLA to secure any financial return on its investment / the option presents a reputational risk to the GLA / cost impactions that the GLA would incur.

7.4. For the repayment from profits option, the GLA should note that although this option is dependent on the profitability of the company and does allow the flexibility to vary repayment should profits be generated more slowly than forecast, the retention of security provides (subject to the realisable of the secured IP) mitigates risk to a degree (although the value of the security is unclear at this stage). The GLA could also continue to justify accounting for the £250,000 as a loan if repayment is considered likely, but this would need to be impaired if financial performance did not match the current projections.

8. Loan terms and security

8.1. The GLA will factor in both creditworthiness and collateral of Tempus Energy Technology Ltd offered when calculating the interest rate for the 'Tempus Energy' project before the novation agreement is signed between the GLA and Tempus Energy Technology Ltd. Previously the interest rate was calculated at 5.88%.

8.2. The loan capital is to be repaid over a three year period commencing in 2017-2019 (table 1 below) with interest paid annually.

Table 1: New repayment schedule: Repayment from profits model

Financial Year	Repay loan*
2016/17	£0
2017/18	£93,520
2018/19	£156,480
Total	£250,000

*Loan repayment amounts above exclude interest payments which will be calculated prior to entering into a novation agreement with Tempus Energy Technology Ltd. Payment of principal and interest should be made on or before 31st March of each given year.

Table 2: Previous repayment schedule

Date	Repay loan	Interest Payments	Total Due
28-Nov-2015	0.00	£2,000	£2,000
28-Jan-2016	0.00	£2,000	£2,000
28-Apr-2016	0.00	£8,841	£8,841
28-Nov-2016*	0.00	£15,451	£15,451
28-Nov-2017*	£83,000	£15,173	£98,173
28-Nov-2018*	£83,000	£10,539	£93,539
28-Nov-2019*	£84,000	£5,894	£89,894
Total	£250,000	£59,898	£309,898

*Payment of principal and interest should be made on or before the 28th November of each given year.

8.3. Repayment terms were considered and developed in relation to the methodology advised by the European Commission including an assessment of the strength of the credit worthiness of the borrower and the collateral offered. The interest rates applied includes an additional 1% margin to account for the period over which the loan is provided.

8.4. The original loan terms developed are also in line with the GLA's general approach to making loans as part of the Growing Places Fund.

8.5. The loan will continue to be secured against the intellectual property (IP) owned by the business which includes copyright and associated rights in Tempus Energy Ltd's ("smart aggregation manager") software and underlying algorithms and potentially (if applications accepted) patents. A valuation company (in 2014) valued the IP at between £3m and £4m. However, this was based on the business expanding as was originally projected and with a patent in place and it is unclear what value it has now or would have in the new entity at this stage. The IP is secured by way of first fixed charge providing the GLA with priority. As the GLA is top ranking on the IP charge, then in the scenario that Tempus Energy Technology Limited sell the IP the GLA would be the first to see money returned to them from it. In order to retain meaningful security the GLA will be making arrangements for the entry into appropriate arrangement with Tempus Energy Technology Limited in this regard. If the security over the IP was capped out to the IP as it stood in 2014, then the debenture will be varied to capture developments in the IP that have taken place in 2015 and 2016, including for example, that in existing in the Tempus Imbalance Predictor (see 5.1 above).

8.6. The ownership of the assets against which the investment is secured (IP) will be transferred over from Tempus Energy Ltd to Tempus Energy Technology Ltd which, in turn, will enter into the security documentation with the GLA.

8.7. The repayment from profits option would mean the GLA continues to hold security[2] over IP. In addition to the current IP the GLA holds as security, Tempus Energy Technology Ltd have made an offer to increase the reach of our security to cover new IP (i.e. IP developed in 2015 and 2016 since debenture was secured in 2014), and have a clause in the agreement that in the event Tempus sell any IP, proceeds must first be used to repay any outstanding amounts from the GPF loan. Officers are discussing this as a possibility further with legal at present, but believe that this would somewhat improve the security arrangement. In this option the GLA will novate their funding agreement to the parent company (Tempus Energy Technology Ltd) where the IP for technology will be held, outputs will be delivered, and profits are forecast to be made.

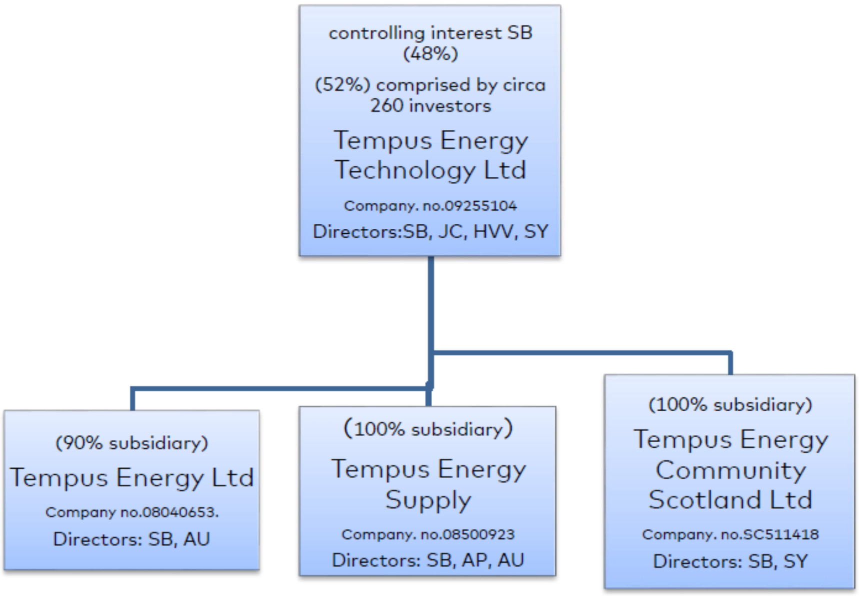
8.8. The GLA will release the security held against capital assets (three Silverdraft Devil Dual Firepro W9100 Graphics Processing Units of approximately £49k in value when valued in 2014) to help the company transition to their Tempus Technology model. The release of £49k of collateral against which the GLA's investment is secured may be considered the provision of financial assistance to Tempus Energy Limited. The value of this assistance however, when taken with other public funding provided to Tempus Energy Limited in the current 3 fiscal year period, is below the EU "de minimis" threshold which, when exceeded, might be considered to constitute unlawful State aid.

9. Financial comments

9.1. Financial comments are included within the body of this report.

10. Tempus Group structure

[2] IP cover the algorithm for the Tempus Imbalance Predictor. Note the GLA would no longer hold security over equipment (originally, on purchase, worth ca. £49k) in this scenario as under the new business model for Tempus they will not need this equipment and it is recommended here that this is sold off to help the company transition to their Tempus Technology model.



Directors Key

SB Sara Louise Bell, TETL employee
JC John Coomber, Non-Executive
HVV Hugo van Vredenburch, Non-Executive
SY Sophie Yule, Former TETL Employee
AU Alex Underwood, TETL employee
AP Andrew Perry, TETL employee

The above diagram shows the Group structure prior to selling off Tempus Energy Supply and salvaging Tempus Technology Ltd.