MEETING NOTE

Meetings MEcon, Marubeni Corporation and HyBONT Project Partners
Cathays Park 10.00 – 13.00 24/8/22

Meeting Objectives
1. To further discuss the project and learn of the assurances Marubeni Corporation are seeking from Welsh Government and partners to enable the HyBONT Project.
2. Discuss other opportunities for inward investment and collaboration pan-Wales for Marubeni, their affiliates and members of their wider corporate network**.**

Agenda
1. 10:00 – 11:00 MECON and Marubeni Corporation Bilateral
2. 11.00 – 12.30 HyBONT Project Partner Multilateral – MEcon, Marubeni Corporation, Bridgend County Borough Council and Cardiff Capital Region

Apologies: David Rosser (Chief Regional Officer, South East Wales).

Attending:

1. 10.00 – 11.00 Welsh Government & Marubeni Corporation Bilateral

Welsh Government
- Vaughan Gething MS, Minister for Economy
- Jon Oates (DD Climate Change & Energy Efficiency)
- [WG official]Transport) [redacted section 40]
- Andrew Gwatkin (International Trade & Investment)
- [WG official] (Industrial Transformation) [redacted section 40]
- [WG official] (Smart Living) [redacted section 40]
- [WG official] (South East Region - Economy) [redacted section 40]

Marubeni Corporation
- Mr. Satoru Harada (Executive Officer, Chief Operating Officer)
- Mr. Hiroshi Tachigami (General Manager, Off-Shore Wind & Domestic Renewable Energy Dept)
- Mr. Tomoki Nishino (President & CEO, Marubeni Europower)
- Mr. George Dodd (Senior Vice President, Marubeni Europower)

2. 11.00 – 12.30 HyBONT Project Partner Multilateral – Welsh Government, Marubeni Corporation, Bridgend County Borough Council and Cardiff Capital Region

Welsh Government
As above. Apologies: [WG official] [redacted section 40] and Andrew Gwatkin.

Marubeni Corporation
As above.

Bridgend County Borough Council
- Cllr Huw David (Bridgend CBC Leader)
- Janine Nightingale (Corporate Director of Communities, Bridgend CBC)

Cardiff Capital Region
- Kellie Beirne (Director)
- [CCR official] [redacted section 40]

Meeting Notes & Actions

10:00 – 11:00 MECON and Marubeni Corporation Bilateral

1. After initial introductions Marubeni talked through a presentation circulated in advance outlining existing relationships (HyBRID supported projects) and projects around the UK, corporate activities globally which synergise with these and WG policy and strategy, and new areas for decarbonisation partners' activity in addition to the HyBONT project (examined in greater detail in the subsequent multilateral session).

2. Nishino stressed Marubeni Corporation's ambition to seek transport demand and also new producing sites in adjacent LAs to BCBC, given that modelling suggested that EV buses could only currently cope with 20% of the routes.

MEcon suggested a natural synergy with RCTCBC and the Vale of Glamorgan CC, both for adjacency and also personal progressive commitment to decarb from the elected council leaders. He also said he felt that Swansea CC and Neath Port Talbot CBC would also seek to emulate and catchup with the work in BCBC as it was being achieved.

3. Nishino said MC felty TfW were overly-focussed on the Swansea Bay Challenge and would need additional H2 supply.

[Material omitted as it is on another matter not captured by this request]

4.[material omitted as it is on another matter not captured by this request]

4. MEcon commented that he was aware RWE is also looking at intensive industrial use of H2. How do Marubeni see the connection between the power sector and the economic development imperatives of H2 deployment? How do they link and what are implications for supply chain and manufacturing.

5. [Material omitted as it is on another matter not captured by this request]
6. [Material omitted as it is on another matter not captured by this request]
7. [Material omitted as it is on another matter not captured by this request]

MEcon observed that all type of demand use and drivers must match up – fleet replacement schedules, the NZ priorities for end use, joined-up transport. He suggested that there were particular policy interests within the Economy team of officials. And the bus component of the demand side was especially significant.

8. [Material omitted as it is on another matter not captured by this request]
9. [WG official redacted Section 40] detailed bus stats (2,000 vehicle pan-Wales, excluding school buses). To decarbonise all public bus fleet by 2035. [Material omitted as it is on another matter not captured by this request]

Decarbonising the school bus fleet would also require similar ingenious solutions. Timescales were aligned to commitments that work.

Nishino detailed the importance of OPEX support for HyBONT in Bridgend to counter the current high costs of H2. The BEIS Net Zero Hydrogen Production Fund (Strand 3) supports Opex (submission deadline 12 October 2022) but stipulates that 75% of offtake must be locked in at the time of application. Therefore in Bridgend with HYBONT a partnership approach and commitment from WG to refuel buses and other vehicles in the CBC over the long term is critical.

JO asked what does "commitment" mean for BEIS? GD responded that it does not mean a contractual commitment at this stage but it does included definite information on scheduling of resources over the timeline of the fund to provide offtake guarantees.

ACTION: GD will provide detailed list of BEIS requirements for NZHF Strand 3 to WG officials and other partners.

[WG official section 40] observed that UK GOV is noncommittal in its support for H2 for larger vehicles. Feedback from manufactures of larger vehicle manufacturers is critical at this stage as to deadlines to supply.

16. [Material omitted as it is on another matter not captured by this request]

17. Final Questions

- JO asked where is the BCBC commitment to supply transport demand for HyBONT? To be discussed further in the multilateral.

- MEcon observed that in the next session of UK Parliament there would be changes of emphases from the new cabinet and PM which would affect H2 policy and delivery, especially with Kwasi Kwarteng moving to the Treasury.

- Nishino asked what does "Team Wales" mean exactly? The term is used often by BCBC. It begs the question – who is the core investor in HyBONT? CCR is "back funding" BCBC.

11.00 – 12.30 HyBONT Project Partner Multilateral – MEcon, Marubeni Corporation (MC), Bridgend County Borough Council and Cardiff Capital Region

1. MEcon set the tone of the meeting, of seeking to collaborate effectively together.

2. Harada welcomed the opportunity to make this express visit from MC HQ to help accelerate the project.

3. Nishino updated all on highlights of discussions in the bilateral and progressed through the main points of his presentation on the HyBONT (previously AEMS) project parameters, deliverables and timeline. He reiterated the criticality of transport off-takers especially public buses, the proximity of the First Cymru bus depot in Brynmenyn to the proposed electrolyser site. He underlined the BEIS ask (see below) for 75% committed offtake for all H2 produced by HyBONT in the advance of the NZHF Strand 3 bid submission deadline on 12 October, and the urgency for this to be resolved as soon as possible. The Bridgend H2 Plant will generate approx. 800kg/day which equates to approx. 40 Fuel Cell Buses in operation (assuming travel distance 200km/day).

4. He reminded that a BCBC study in 2019 concluded 80% of the First Cymru bus routes in Bridgend are not suited for EVs.

5.. [Material omitted as it is on another matter not captured by this request]

6. Nishino set out MC's "Seven Asks" for WG support urgently for the next stage of the HyBONT project to go ahead and to help draw down BEIS investment:

i. TfW to run 20 hydrogen service buses in Bridgend from summer 2025.
ii. TfW to also consider running hydrogen school buses for Coleg Cymunedol Y Dderwen (@Sarn) from summer 2025.
iii. Commitment for TfW to buy green hydrogen from Bridgend electrolyser for; • Bridgend hydrogen bus project (both service buses and school buses) • TfW Swansea Bay hydrogen bus project
iv. Support to BCBC for the refuse vehicle purchase price. (BCBC RCV fleet needs replacing anyway, could Welsh Government support the extra price for hydrogen RCVs.)
v. Support BCBC to find other hydrogen heavy vehicle applications from Brynmenyn depot (JCB, gritter trucks, school buses, etc).
vi. Support BCBC for the Sarn heat network to transition to Zero Carbon. Engineering studies and heat network funding.
vii. To support the project to find other green hydrogen customers.

7. MEcon reflected that we are currently remoulding our regulatory model and service approach. [redacted] [WG official section 40] noted that there were several operators involved and there would be different operators and options within the CCR zone.

8. GD explained that the BEIS Opex support would last for 10 – 15 years. MEcon asked what level of guarantee re offtake was required at this stage. GD answered that since these gas supply agreements are relatively novel in character and contractual form, reflecting the character of the emerging H2 market, and therefore they are still working out the full implications.

9. MEcon asked BCBC and CCR to detail the extent of their inputs to ensure HyBONT can be delivered. Cllr David underlined the growing significance of the renewables in the cost-of-living crisis, the superiority of H2 in hilly terrain, its role on transcending grid constraints and the broader benefits to Wales from the HyBONT trial activities, learning and outputs. For him this is a question of identifying a way to accelerate the decarbonisation process, but also recognising other stressors acting on the LAs due to contextual crises.

10. MEcon reflected that the Seven Asks required most investment from WG Transport, Regional development and the LAs.

11. JN outlined concrete inputs from BCBCs:

- land for the electrises facility

- a solar PV farm adjacent to the site

- an offtake agreement for 6 RCVs (10 year lifespan)

- offtake agreement for heating adjacent public buildings (school, swimming pool etc)

As HyBONT is considered in law an R&D activity there is a derogation from usual procurement process. The ask here is for CAPEX support from WG.

The data on H2 superiority over EV for RCVs on difficulty terrain is incontrovertible. WG Circular Economy currently only tops ups the cost of EV RVCS over the conventional diesel vehicles (approx. £100K per unit). They should consider supporting top-ups for H2 RCVS as well (approx. £250k per unit) as they are more efficient and deployable and require no downtime for recharging. BCBCs fleet is not sufficient to supply the offtake capacity HyBONT requires. They are investigating options with SW Police, Ambulance Service, SW Fire & Rescue.

12. KB added re CCR's contribution. She noted that we should add the *Cost of Doing Business Crisis* to the Seven Asks. CCRA has (a) the Region Challenge Fund with £10m, to fund transport transformation over 5 years. The ambition is to find 900 larger load vehicles in total across 10 LAs, through rapid prototyping and an innovation partnership (SBRI model); [Material omitted as it is on another matter not captured by this request]

12. MEcon asked that BCBC and CCR work through these opportunities keeping WG officials sighted and part of a joined-up conversation. The basic issue at the moment is to consolidate sufficient detail to get HyBONT through the BEIS Gateway, with other details to be resolved with granularity in due course.

13. MEcon noted he was also very interested in the JV structure and how it would share risk and reward, especially with his hat on as Science Minister.

14. [redacted] [WG official section 40] stressed that TfW were not in a position currently to make definite financial commitments at this stage re H2 bus procurement.

15. MECON asked re RVCs when would the data from the Fawn Zoeller trials be available? He also asked re BCBC RCV fleet renewal – JN stated 2025, and there would be no diesel vehicles purchased at that time (6 vehicles will be required). BCBC have been to the Wirral to fact find on H2 RCVs in action and are confident they are what they require.

16. CCR said that they are Challenge Fund demand scoping with a KTN embedded Transport specialist and they would share that data. [redacted] [WG official][redacted section 40] said he was already in contact and would liaise further.

17. RB noted the concept of mobility as a service and the concept of the optimising of mobility as a service e.g. School Buses.

18. JO reflected that there is still a lack of clarity on levels of commitment to HyBONT and the total cost of ownership of the scheme. JN responded that decarbonisation costs were not solely predicated on market prices for gas and responded to the longer-term NZ agenda and investment that entailed. She asked if some of the H2 bus investment earmarked for Swansea Bay could be diverted to BCBC and HyBONT? Ten buses perhaps to be refuelled at Brynmenyn. MEcon said that Cllr Stuart of Swansea Cc would be willing to see the case from an all-Wales perspective for allocating some buses to refuel in BCBC if approached.

19. [redacted] [WG official redacted section 40] noted that a simple 1:1 equivalency of H2 bus to diesel bus is inaccurate and that route analysis is critical to determine future vehicle type and fuel.

20. GD explained that after proposal submission to BEIS on 12/10/22 there would be a further 9 month decision-making process and further info gathering until a final decision in May/June 2023. Now is the time start to build the narrative for TfW as main driver of HyBONT.

21. MEcon noted that the issues we must address encompass more than buses – the nature and pace of demand; a fuller understanding of that demand and industrial data on use and demand for vehicles, especially in the context of refuse collection. This data must be shared and understood by all sides. This will help our H2 ambitions for all towns and an opportunity that we all want at this stage.

ACTIONS AGREED:

1. All HyBONT partners to address the 7 Asks with urgency and how to fast track them.
2. BCBC via JN to coordinate Team Wales inputs for this and map responses to the 7 Asks in an Action Plan.
3. HEI partners to be identified and brought into the team.
4. CCR to further identify resources within its purview to enable HyBONT.
5. WG to nominate a head official as chief point of collaboration with urgency.
6. WG officials to liaise directly with BEIS on the NZHF Strand 3 and HyBONT.
7. WG officials to continue conversations with HyBONT partners and work through the timeframe to 12/10 and beyond.
8. HyBONT partners to brief MEcon on project JV development going forward.
9. Market demand and estimates (inc RCVs) to be worked up by BCBC and calculate further additional non-BCBC demand requirement needed.
10. BEIS requirements as communicated to Marubeni to be shared with all HyBONT partners.
11. Template for responses/inputs to the 7 Asks to be drawn-up and circulated.

END