Swansea Bay City Deal – Supporting Innovation & Low Carbon Growth Programme

Proposed Advanced Manufacturing Production Facility enhanced project to incorporate a 'National Net Zero Skills Centre of Excellence'

Executive Summary

This summary document has been prepared in response to addressing the unallocated £5.3M City Deal funds under discussion by the Chief Executives and Leaders of the Joint Committee. The document explores the option of NPTC using these funds in conjunction with the existing Advanced Manufacturing Production Facility (AMPF) project. This enhanced AMPF project, the first of its kind in Wales, will also include a new ***National Net Zero Skills Centre of Excellence*** which has been shown to be a requirement by industry and the region. The facility will provide industry led skills to upskill the existing workforce and provide relevant training for new people who wish to work in the green economy and maximise the opportunity of the number of developments in the region e.g. Freeports, Floating Offshore Wind (FLOW), Blue Eden Project, Homes as Power Stations (HAPS), Skills and Talent and the Supporting Innovation and Low Carbon Growth (SILCG) Programme.

The enhanced AMPF project will support the diversification of the economy, through the creation of value-added jobs and the creation of a working environment where manufacturing and innovative businesses can flourish and where products can be commercialised, thus increasing the GVA of the region. The facility will also support start-ups and the growth of indigenous businesses.

The additional benefits of the £5.3m City Deal funding will enable:

Investment objectives – To deliver a national Centre of Excellence for Net Zero Skills by 2026

Key deliverables – Industry led hybrid facility offering specialist facilities to commercialise RD&I (proving factory concept) supported by industry led skills provision to complement FE/HE provision in the region.

The initial Level of outcomes for learners would be targeted at Level 3+, upskilling craftsperson's to a new content or higher level not currently available through their Work Based Learning or Academic programmes of study. This would be an industry led facility and the training provided would respond to the needs of industry, with approximately three quarters of local companies reporting skills gaps.

- The Net Zero Skills CofE would provide access to cutting edge equipment, systems and software in a state-of-the-art facility (namely within the AMPF), tailored to the needs of learners and industry ensuring a prolific learning experience. It would provide Employment Led and Oriented Training needed to develop company quotas for economic improvement and sustainability.
- It would be an enterprise providing the highest quality training by expert trainers in a simulating environment endorsed by leading industrial vendors.
- The trainers would be from industry/academia or in industry and seconded for their expertise.
- The specialist training programmes would be designed to reduce the skills gaps in supporting industry to accelerate innovation through technology.

Outcomes/impact <u>are in addition and distinct</u> from the existing SILCG BC around AMPF and Skills and Talent deliverables i.e. no duplication to existing initiatives (these outputs/outcomes are conservative estimates based on similar projects and will be confirmed during the business planning process).

Indicators	AMPF OBC (1)	NNZSCoE (2)	Enhanced AMPF (1&2 combined)
Land Developed	0.81ha	-	0.81ha
Premises Created	4,000m2	1,000m2*	5,000m2
Jobs Accommodated	111	29	140
Jobs Created/safeguarded	88 (+10 construction)	15	113
SMEs accommodated	15	-	15
SBCD Investment	£17.2M	£5.3M	£22.5M
Public Sector	-	£50M+	£50M+
Private Sector	£500K/yr (to 2033)	£5.5M	£9M
GVA uplift	-	£4bn over 20 years*	£4bn over 20 years*
No. of Courses/pa	-	50+	50+
No. of Individuals trained by 2033	-	3,500	3,500

*based on AMRC figures, to be further evaluated during the business plan process over the next few months

Outputs (additional / added value) – approx. 4,500-5,000m2 of specialist facility (to be finalised during the design and build process)

Operating model options

There will be a competitive procurement exercise to appoint the operator for the facility to maximise revenue and links to industry. There is significant interest from industry to operate the facility and from end users. A pre-market engagement workshop is planned in collaboration with Industry Wales.

Industry Wales are supporting the pre-market engagement activity relating to the enhanced AMPF including Industry, FE, HE, schools, and spin out companies to ensure the facility meets the current and future needs of industry.

Key partners

We have engaged and have support from the following key partners / stakeholders:

- Local Authorities
- FE
- HE
- Industry Wales
- NZIW (Net Zero Industry Wales)
- RLSP
- Local industry

Financial Profile

Key partners involved in the AMPF working group have already submitted bids worth over £8m for the region in the last 6 months. The collaborative approach to securing public and private sector investment will be strengthened through the development of the AMPF. A collaborative development between government, industry and academia based on the 'proving factories' concept (late TRL level to MRL level). It is estimated that over £40m of private and public research funding will be leveraged over the first 5 years of operation – this leverage of public and private funding will increase as a result of the enhancement. This will be developed

through the revised business plan process over the next few months. The facility will enable additional private, public and research funding to be secured in addition to the current financial profile.

Evidence

The additional skills aspect to AMPF is aligned to industry need to enhance provision and will be complementary to existing local, regional and national interventions and will add value to the Skills and Talent project.

Industrial decarbonisation is a major challenge if Wales is to reach Net Zero by 2030 and appropriate skills in the workforce is key to achieving this target. Wales is ideally placed to be a test bed for the rapid transition to low carbon technology and there are significant benefits to be gained from a co-ordinated, national approach to industrial decarbonisation and the creation of a green energy economy.

The Centre of Excellence for Net Zero Skills will support an ambitious programme to engage and interact with the FE and HE sectors and establish a system to ensure there are no barriers to skills escalation. The AMPF will offer a flexible delivery model that utilises advances in online guided learning, in person teaching and practical sessions, industry collaborations and high-level applied research. People can access short, CPD or credit bearing courses and use these to build qualifications, or simply to gain the skills needed for their role.

The recently published skills barometer provides the evidence that South West Wales is lacking in skills providers who can support the net zero skills agenda with courses appropriate to this area. In addition, Industry Wales has identified the need for industry led skills provision to meet the needs of industry over the next 5 to 15 years.

Alignment to UK, National, Regional and Local policies and strategies

The proposal is aligned to delivering key areas of UK, National (Wales), Regional and local policies and strategies including:

- Stronger, Fairer, Greener Wales: Net Zero Skills Action Plan (February, 2023)
- NPTC DARE Strategy (May, 2020)
- SW Wales Regional Economic Delivery Plan
- WG Manufacturing Action Plan

WG have stated in their recent net zero skills action plan *"Skills will be a key enabler as we transition to a net zero economy".*

Delivery Timeline

It is anticipated that a procurement exercise to identify an appropriate partner / operator for the facility will commence in June 2023. A two-stage design and build procurement process will also commence in June 2023 and is expected to take approximately twelve months. Construction will commence from July 2024 with an estimated completion aimed for early 2026. Equipment for the building will be installed during and post construction.