## Unite concept for Port Talbot The current plan from Tata is a hammer blow. It would severely shrink the plant: cutting production capacity by another 40%, with thousands of job losses. Another well-meaning proposal from the consultants Syndex also involves cutting capacity. It would also mean thousands of job losses: some immediately, and some in the longer term.

## Comments

The plan proposed by the multi-union committee, and not by Syndex, is a plan based on the maximisation of the current capacity of Tata Steel UK (TSUK) i.e. on 3.2-3.4mt of Hot Rolled Coil (HRC).

This is delivered through the combination of a 1.5mt Electric Arc Furnace (EAF), mainly scrap fed, for primarily structural steel (through Caster 1) and Blast Furnace Number 4 (BF4) producing 2mt of liquid steel until 2032. There is absolutely no cut in capacity, on the contrary it is a plan delivering 40% more liquid steel than under the management proposal of a 3mt EAF, which produces only 2.5mt of HRC.

Unite seems to have forgotten the limit of the Hot Strip Mill (HSM), which can't handle more than 3.4mt (even if it has a nameplate of 3.6mt), as well as the limit of the BOS plant. The experts of Unite also appear to have forgotten that the HSM in Llanwern has been mothballed for over a decade.

The Multi-Union Plan can secure more than 2300 jobs of the 3000 jobs at risk immediately. The favoured second phase, an Open Slag Bath Furnace (OSBF), can also protect more jobs than any EAFs scenario, notably because of the lower operational costs and the need of a Direct Reduction Plant. The current choice for a smaller EAF aims at protecting the BF4 until end of life. Indeed, with a bigger EAF, following a ramp up phase where It can operate in parallel to the BF4 (around 12 months), the BF4 will have to close.

To ensure long term future of production and jobs we propose expanding overall capacity (from current 5Mt) by building multiple new EAFs.

The lack of understanding of the context by Unite's experts is indeed clear. Port Talbot does not have 5mt capacity – it has capacity of 3.6mt maximum and 3.4mt more realistically.

If the idea of Unite is to produce millions of tonnes of loss-making semi-finished products they still face significant additional constraints to producing anywhere near 5mt at Port Talbot: including the Basic Oxygen Furnace (BOF) shop and even the Casters which have a real capacity well below their nameplate capacity.

With the UK steel flats market at 4mt and with 2mt already sold locally in the UK by TSUK, even the displacement of 100% of imports would not be sufficent to support a production of 5mt. The UK market for flat is estimated to increase slightly to 4.2mt by 2030. Lots of UK clients, notably in automotive, require at least a dual supply. Capturing 100% of the local market is not achievable. 5mt of finished steel would

require at least an increase of exports by 70%. Exports are of course price sensitive. Work can start immediately on building a Direct A DRI facility is needed to deliver the full Reduced Iron (DRI) facility: a low carbon decarbonisation of steelmaking, however Unite replacement for blast furnace iron. This can overestimates the jobs attached to a DRI. transition to using green hydrogen in future when Depending on the size of the DRI between 150 this becomes available. and 300 roles will be added. This is of course a tiny fraction of the jobs in the current heavy end at Port Talbot. With a 3Mt EAF and the current mix of raw material (scrap/pig iron and HBI) based on a low level of HBI, a DRI would not be viable. A phased transition: keep Blast Given the relatively small number of jobs in any Furnace 4 open until end of life future DRI plant, a new iron making facility will (2034). Blast Furnace 5 will close down by NOT maintain all existing jobs. It is a detail but the end of life of BF4 is 2032 (already stretched) its end of life in 2027. But Blast Furnace 4 and not 2034 as suggested by Unite. Unite has must stay open until its end of life in 2034: or close earlier only if replaced by new ironcorrected this for their presentation to the making facility with all jobs maintained. NTUSCC. This presentation has also confirmed that the estimation by Unite of the jobs impacted by the closure of the heavy end is well below the actual figures. The issue with the concept presented by Unite seems that it is not based on a clear understanding of the economics of an EAF or a DRI-EAF solution. Indeed, the slab costs of an EAF are well above that of a traditional blast furnace, and therefore the only way to obtain a viable and competitive business is to cut the fixed costs, and notably employment costs, to the bone. The bigger the EAF the lower are the number jobs by tonne of steel. Nucor's new plant, in West Virginia, has 2 EAFs and produces 3mt of finished flat steel with currently 800 employees, but is targeting less than 600 employees in the near future. The impact on jobs is the reason why the multi unions strongly opposed an EAF-only solution and favoured an OSBF in the second phase which thanks to a lower operational costs base, a wider range of grades produced, and a higher decarbonisation level, allows for more competitiveness and creates less pressure on job reduction. ArcelorMittal, ThyssenKrupp, Posco, and lots of other producers, including Tata Steel in the Netherlands, have all based their decarbonisation strategy on the development of this technology. Build a new 3Mt Electric Arc Furnace A 3mt EAF alone would reduce the volume of (EAF) by 2027. This is already costed and liquid steel produced in Port Talbot from 3.2/3.4mt to 2.6/2.7mt, allowing the production funded under the Tata / government plan. A of just 2.5mt of HRC, thereby forcing the UK to small 1.5Mt EAF is not enough to maintain production and jobs import additional steel.

Unite's idea to have the 3mt EAF by 2027, two years before Tata's proposal, and to maintain the BF4 after that point is not workable given the constraint explained above. The BF4 will have to be shut down before the start of the full production of the EAF with an immediate loss of 2300 jobs compared to the Multi-Union Plan, within the heavy end, and close to 2600 jobs when the downstream assets, which are all maintained in the Multi-Union Plan, are factored in.

As the Unite plan wants the EAF to be fully operational in 2027, this means that the BF4 is likely to close sometime in 2026. A 3mt EAF will need fewer than 300 people to operate, two small EAFs would need around 400 employees (of course the Multi-Union Plan's favoured solution for phase 2 is an OSBF). One small EAF will need almost the same number of jobs as does a big EAF. The reasons why the commission of a 3mt EAF will mean the death of the BF4 and the loss of 2600 jobs are as follows:

The most valued products are made via Caster 3. The BF4 will feed the Caster 3. A small EAF could be feeding Caster 1 and does not need Caster 3. A large EAF of 2.7mt of liquid steel would need to use Caster 3 as it would have 1.2mt of liquid steel in excess of Caster 1 capability and portfolio needs. This also exceeds the capability and market attractiveness of Caster 2. The 3mt EAF is planned to feed the Caster 3 and use the Caster 1 as a buffer to balance the speed of the Caster 3 and the tap to tap time of the EAF.

In order to feed Caster 3 with the EAF, the flow from the BF4 to Caster 3 will have to be stopped. This will also happen later if a second small EAF is added. An OSBF, the favoured solution, would allow a seamless transition. A second EAF would surely require the interruption of the steelplant operation during the construction period.

After the commissioning of the 3mt EAF, the BF4 will never come back. Indeed, the bottleneck of the plant is the HSM. It can't handle more than 3.4mt of slabs (and in reality 3.2mt).

Therefore, under Unite's proposal, the demand for a 3mt EAF by 2027 will result in the closure of the BF4 before that date and the almost immediate loss of 3000 jobs by the end of 2026.

The unions in Tata Steel Netherlands are opposed to the introduction of a 3mt EAF for the

same reasons as Community and GMB. The timing of the second phase with an OSBF is fully aligned with Tata's plan for the Netherlands, where an OSBF is central to their second phase. ThyssenKrupp will start production via an OSBF by 2026 and has already started construction. Can EAFs produce high quality steel? This is just not true and no one in the industry Yes. EAFs can produce any type of steel, depending would seriously say that an EAF is currently on the quality of the input materials. By combining able to produce all range of flat steel. EAFs are not able to produce a wide range of grades and high quality scrap steel with additional virgin iron, EAFs can produce virgin steel of the highest quality. notably key grades for automotive and The EAFs at Forgemasters in Sheffield, and at Liberty packaging. Steel, produce highly specialist steel products for the nuclear, aviation and defence industries. The experts of Unite may be misled by the idea that speciality steel shows that the highest grades are deliverable via an EAF - they don't seem take into account the specific issue of the formable flat steel products. It is not a question of highest or lowest grades, just a total different world. This is the main problem of Unite's concept. The There is no set number for how many jobs an EAF obvious absence of knowledge of the can support. economics of an EAF and of actual references. The UK steelmaking production was of 6mt (flat We propose doubling of UK steelmaking capacity to 20Mt by 2035. and long) in 2022, down from 7mt in 2021, with an apparent demand of 9mt in 2022 (flat and long). 20mt would be more than tripling the UK's steel production. It is possible that Unite's expert has mistakenly taken the demand figures instead of the production figures as their reference point for presenting their ambitions? Our position is that there must be no closure of the Waiting for green hydrogen in sufficient volume BOF at Port Talbot until construction of the Electric would mean having to wait until well after 2032. The timeline for a switch to hydrogen by the Arc Furnaces is complete and all jobs are protected. Similarly, the Blast Furnaces must be kept steel industry is more likely to be 2040-45. In operational until the end of their natural life span the interim does Unite intend to propose a full relining of BF4 (and BF5)? when green hydrogen DRI will be available. At no point will we allow jobs to be lost during the transition. In relation to jobs, the position of Community and GMB is that no compulsory redundancies must be the rule but also that all avenues need to be analysed to maintain the jobs in Port Talbot and downstream operations. The Multi-Union Plan saves immediately more than 2300 jobs over the 3000 jobs at risk, and gives time to find a solution for every role impacted, whereas Unite's proposal, in fact similar to the management proposal with the commissioning of a 3mt EAF, means the loss of 3000 jobs before 2027....