

Australian Manufacturing Inquiry

United Workers' Union response to further questions on notice

Q. Could you expand a bit on your views about supply chain risk at the mRNA component level, and specifically, what you think the governments' role should be in supporting businesses who manufacturing some of those local components.

GSK's Australian production of pharmaceuticals was born during World War I after the Ottoman Empire cut off access to poppies to produce opioids. It is somewhat ironic, therefore, that GSK's Boronia plant is closing in the middle of a period when international supply chains have come under renewed stress. The supply chain risks at the mRNA component level need to be considered within the overall context of Australia's ability to supply pharmaceutical products locally. Firstly, there are overlapping supply chain needs that are critical for mRNA production specifically that are necessary for more general pharmaceutical production. Secondly, mRNA capacity will be much stronger and more sustainable within a strong pharmaceutical manufacturing base.

United Workers' Union ("UWU") has identified the following areas as critical for mRNA production where there is no significant or limited production capacity in Australia:

- Sterile, single-use plastic bags
- Lipids in nanoparticles
- Active ingredient DNA

In addition, the component manufacturers that large pharmaceutical companies producing mRNA overseas rely on to supply them do not have a domestic manufacturing presence. This means that when mRNA production is established in Australia there will be no domestic supplies for a range of components. Consequently the industry will remain at the mercy of global supply chains. This is in the context of global shortages of medical grade plastics and key precursor chemicals in mRNA production.

UWU would recommend the government act as an enabler of pharmaceutical supply chain security with the following four measures:

1. *Draft, fund and implement a recycled plastics manufacturing industry plan.* We draw this out specifically due to the technological and climatic disruption playing out in the domestic oil supply chain with the closure of the ExxonMobil refinery. This places the Altona petrochemical complex under pressure which then in turn puts Australia's domestic production of plastics in danger. There is potential scope, however, as part of a plan for Australia to meet its obligations under the Paris Agreement to build up the physical and chemical recycling of plastics (provided such chemical recycling is not used to produce petrol).

2. *Implement a domestic pharmaceutical supply chain working group.* Approximately 10 years ago, GSK shifted supply chain acquisition responsibility from its Boronia factory to Singapore. This coincided with several decisions to shift suppliers away from Australia. Ultimately, supply chain security will require that such decisions are again made locally. To do this, the federal government, through the Department of Industry, Science, Energy and Resources, should convene a pharmaceutical supply chain working group that undertakes the following tasks and functions:
 - a. Conduct an audit of the key suppliers of all TGA-approved production facilities noting that this information may, at times, need to remain confidential within the government.
 - b. Map this supply chain to identify potential risks as well as opportunities to shift production onshore
 - c. Fund the cost differential for relocating or establishing onshore suppliers
 - d. Act as a medium for group-buying to ensure sustainable and cost-effective production for the longer term
 - e. Such a working group should have industry representation from both employers and unions. Better realising the value of the unfiltered perspective from the factory floor is a key area of microeconomic reform that can drive the next generation of productivity gains.

3. *Identify mRNA specific gaps in lipids and active ingredient DNA.* There will remain specific mRNA supply chain gaps in lipids and active ingredient DNA. Partly this issue will be more easily fixed within a wholistic pharma and mRNA industry plan. It is such a plan that should identify the number of mRNA facilities over what period can be built, which in turn will govern the size of the local market. In short, having an export-orientated plan that is supported by an expansive foreign aid vaccination agenda should in turn better secure local supply chains. Nonetheless, further investigation will be required as to any additional support that may be needed.

4. *Better secure intellectual and proprietary capital within Australia.* As identified above who holds what power within corporations and on what basis they make decisions matter. Shifting Australia from being a branch office to a head office (noting that this a spectrum rather than a binary decision) will have positive supply chain flow on. This will require both a bigger investment in research capacity and better infrastructure to commercialise such research as such the Union would recommend the following:
 - a. Significantly increasing funding for the university sector and supporting a shift away from the reliance on insecure work within universities. Medical researchers who do not know how many hours they will get to work the next semester are not going to have the security to push the envelope of human knowledge and experimentation.

- b. Shift at least one of Pfizer Perth and GSK Boronia into shared production facilities so that new market entrants can test and fail locally at a much cheaper rate. Given the relative proximity and historical work relationships both facilities have had with Curtin University and Monash University respectively, this will set up a much more effective knowledge to production pipeline where the end result is more viable Australian-owned enterprises.

Q. Could you expand upon what you see as the current challenges with the VET sector and how you think it might be best reformed. And also, what role you see for unions in supporting those reforms?

The failure to properly align skills and industry policies and outcomes nationally has meant that it is hard to both train workers in the areas we need, as well as ensure we create good, secure jobs and don't lose the skills workers already have.

The federal government must have an industry strategy and skills strategy that looks to the jobs of the future, allows current and future workers clear pathways to training for jobs that will be in demand once they finish their studies, with an emphasis on lifelong learning. Mapping out and investing in the jobs we need across metropolitan and regional Australia will allow a skills plan to be developed that is targeted and will deliver outcomes and economic stimulation in our communities.

Fragmentation of VET is another issue, and a more unified publicly funded TAFE system with secure jobs for support and teaching staff should be a goal for governments. Unions should be engaged at a skills and industry planning level alongside government and other stakeholders, and Departments and Ministers with responsibility for both skills and industry need to have formalised communication and consultation structures to ensure that industry and skills are better aligned. Unions should also be consulted on curriculum development. Union inductions should be a mandatory part of the curriculum within the first month of a student beginning their course and students should also undertake and pass a compulsory unit in workplace rights.

Q. Moving beyond the setting of emissions reduction targets, what support do you think the government should provide to drive growth in clean manufacturing and clean electrification?

The trade implications of climate action are both a threat and an opportunity. The same basis on which trade sanctions may be imposed upon Australia are also the same basis on which Australia can institute unilateral protectionist measures to rebuild green manufacturing. This would have the impact of exporting renewable energy to the world in both commodity and critically value-added forms. The Union's submission to this inquiry details such trade measures.

This would represent a synthesis of the competing approaches to trade policy since Federation. 1901-1972 represents a protectionist period, that is protecting Australian manufacturing from global competition. The time since, has represented a relatively integrated approach to global markets. This has come at the cost of grossly simplifying Australia's productive base to the extent that it threatens

community safety in a variety of ways. The third period would seek to use protectionist measures as a temporary state of affairs in order to build up an export manufacturing sector founded on Australia's natural renewable energy advantage that is integrated into the global economy.

In addition, the Union would suggest the following measures are prioritised to support a growth of green manufacturing and renewable energy:

- Set a national target for renewable energy of 700% of current Australian electricity needs. This would foster the decarbonisation work that needs to occur in the electricity sector, the electrification of heating processes, transport and setting up the ability to export manufactured products that are energy intensive such as ammonia, aluminium and steel. The building of a lot of renewable energy is a capacity enhancer – build a lot of renewable energy and a lot more things are possible.
- Work with state governments through the COAG Energy Council to reform the retail electricity sector to set up an energy as a service system. This would allow households to invest in electrification and energy efficiency upgrades in their home and pay off the costs through savings in their regular energy bills. This would have the additional benefit of reducing household demand for gas so that domestic gas supplies can be reserved for bespoke industrial processes that may require gas as an input for at least a decade or more. In addition, it would unlock a new market worth potentially billions of dollars that would improve the living standards of Australians, support more jobs in trades and support more jobs in building products manufacturing.
- Take up the joint call of the Australian Industry Group and the Australian Council of Trade Unions to support the electrification of industry and manufacturing. This would also reduce demand for gas, and as more renewable energy is getting built vastly reduce energy costs for existing manufacturing. Potentially this work could be funded out of the additional revenue generated from the energy as a service reform detailed above.

The above does not represent the entirety of the Union's climate response but should be regarded rather as a concurrent set of urgent triage measures.