

# OPPORTUNITIES FOR VICTORIAN WORKERS



# TRANSITION FROM CRISIS

Victorian Trades Hall Council's Just Transition & Economic Recovery Strategy

# What does climate change mean for workers?

## FRANCIS TABI AND EVANA TIRO FARM WORKERS

Francis Tabi and Evana Tiro arrived in Victoria to work as seasonal workers in the hope of making some decent income to send home to their family in Vanuatu but the weather, climate change and then COVID-19 put a halt to their plans.

The couple arrived in late October last year just ahead of the grape harvest and went to Mildura ready to work and keen to support their family back at home.

They arrived in Mildura to pick grapes during a drought and just ahead of one of Australia's worst bushfire seasons. Francis and Evana had to work in extreme heat and didn't have enough water. They were sent home by their supervisor and not paid when there were dust storms, or if it rained.

"We had no idea what a dust storm was before coming to Australia. We don't get them at home and at home when it rains we still work - it's different here," says Evana.

The pair were still paying up to \$200 a week to their employer for accommodation and food. They quickly racked up a debt of well over \$1,000 after their hours were cut in December and January.

Seasonal workers like Francis and Evana live at the whim of the weather and the climate. If something is wrong with the crop, workers bear all the risk.

This means workers like Francis and Evana have had to sit around for weeks building up debt. When the grapes were ready to pick, they were harder to pick which meant they were paid less because they are paid per piece they pick (on piece rates).

Francis and Evana decided to do something about the poor conditions and lack of pay. They joined the United Workers Union and went on strike because they weren't getting enough hours and therefore pay.

Typically the couple would only have been in Australia for six months under the conditions of the seasonal workers programme, but when COVID-19 hit the country in full force they couldn't get flights home.

A month after Australia was put into lockdown, Vanuatu faced another challenge - cyclone Harold.

Francis and Evana watched from afar as their parents and two sons lived through the cyclone and had to try to repair their badly damaged home.

They were unable to send any money home because their hours had been cut.



**The principles for our strategy emphasise the centrality of workers' interests and the scientific facts related to the climate:**

- **Workers and their communities from carbon intensive sectors should be better off.** This includes workers and communities that already find themselves detrimentally impacted due to closures in carbon intensive industries;
- Directly affected workers and communities must be at the heart of all planning, decision-making and action;
- Action must be commensurate with the risks we face, namely that the current high risk requires a comprehensive response;
- Management of the transition cannot be left to the market. It requires detailed planning and investment, including public ownership, and intervention by all levels of government;
- New energy forms must have a social licence to operate, including and specifically from Traditional Owners. This includes any changes to land use, the ownership models of energy generation and genuine job creation for First Nations communities;
- Support job creation and employment in sustainable industries; specifically, provide good quality, safe and secure unionised jobs;
- Target socially, economically and environmentally useful activities that help the Victorian economy in the long term;
- Ensure that the most vulnerable workers and communities are given priority access to those jobs

# The principles underlying our strategy

**The fundamental principle underlying this strategy is that because dealing with climate change involves large-scale economic restructuring, workers must be placed at the centre of the process. Technological change is important – how we generate electricity, for instance – but no more so than questions of who owns the technology, whose interests are served by delaying action on climate change, and whose interests will be most harmed by a poorly managed transition.**

# Victoria's challenges and opportunities

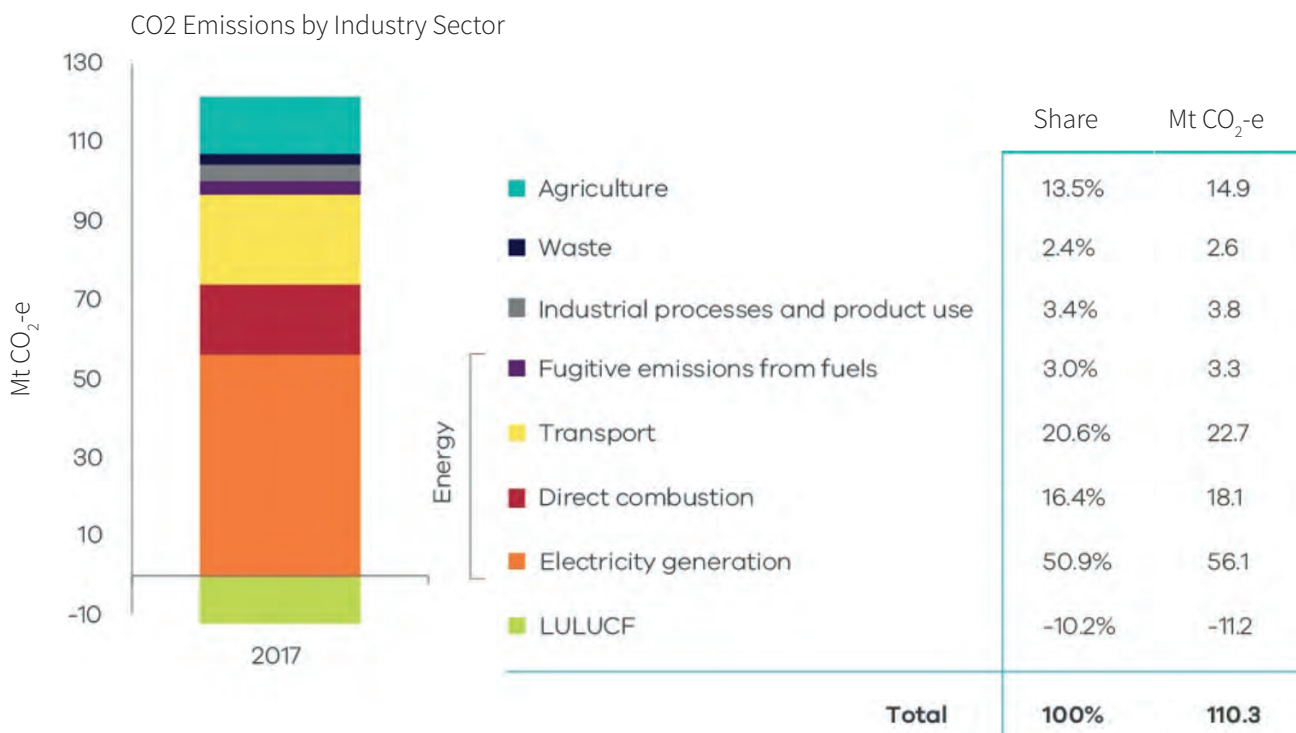
What do they mean for workers and unions?

Australia has a high-emissions economy. To a considerable extent, this is driven by our reliance on fossil fuels for electricity generation, but other factors include:

- Relatively old heavy industry plant and equipment;
- High rates of land clearance;
- Extensive livestock agriculture and other resource-intensive agricultural practices;

- High rates of car use and relatively poor public transport; and
- Low density urban areas, and relatively low energy efficiency requirements for construction.

This means that while transformation of energy generation is fundamental to the shift to a sustainable economy, the electricity sector and its workers cannot be left to do all the heavy lifting on their own.



# ENERGY GENERATION

## Challenges

One of the biggest challenges in decarbonising the electricity system is to ensure that the interests of the workers and communities who built and have driven the system that has underpinned the state's prosperity for so long are at the forefront of the transformation process.

Given the number of coal-fired power stations that have closed in recent years (around one third between 2012 and 2017), it can be expected that other power stations will close earlier than their nominal technical lifespans.

For Victoria, the forecast closing dates are: Yallourn in 2032, Loy Yang A in 2048 and Loy Yang B in 2038. However, as the experience of Hazelwood's closure demonstrates, and as the CFMEU Mining Division can attest, the impact of energy companies unilaterally closing plants, without adequate consultation with workers, can be hugely damaging. We must pre-empt this with our own preparations, and expectations of government, for alternative employment and energy production.



**Unions need to ensure that future closures are accompanied by adequate warning and full processes for workforce transition agreed between workers and their unions, government (including regulators) and owners, including the following elements:**

1. Guaranteed new employment for all current workers who want it;
2. A job transfer scheme between closing power stations and those yet to close, with an obligation on employers to employ first from a redundancy pool;
3. Guaranteed job transfers into new energy sector jobs, including offshore wind, other forms of renewable energy generation, site rehabilitation and hydrogen manufacture;
4. Retraining for all workers who want it;
5. Enhanced redundancy, retirement and wage maintenance schemes for power station workers;
6. Mechanisms to hold companies to account for closure dates and redeployment, retraining and other commitments;
7. A plan for the replacement generation and its location;
8. A plan for the grid upgrades necessary to facilitate the energy transformation; and
9. Committed funding from employers and governments to ensure all elements of the plan are implemented.

## Framework policies to facilitate the energy transformation:

- Emission reduction targets that are compatible with keeping temperature increases to 1.5°
- Ambitious renewable energy targets that maximise the development of the renewable energy industry;
- Commitment to public agencies sourcing their energy needs from renewable energy sources, through, for instance, power purchase agreements with renewable generators, and installation of solar power on schools, TAFEs and early childhood centres, and other government buildings;
- Direct public investment in renewable energy generation;
- The Victorian Government should establish a renewable energy generation authority to build, own and operate renewable energy assets;
- Support for the development of an offshore wind industry based in Victoria with a view to supporting its expansion across the rest of Australia and our region;
- The establishment of industry-wide collective bargaining in the renewable energy industry involving the relevant unions, with a commitment to improved terms and conditions of employment, including a preference for ongoing employment. Further, all government-funded projects should be used to establish good employment terms and conditions;
- Encourage energy efficiency, including by mandating installation of solar hot water systems in new houses, improved star-rating systems, mandatory efficiency standards in rental properties, and upgrades to public housing;
- Improve infrastructure and regulation for electric vehicles (EV) and other incentives to maximise uptake of EVs, and EV sharing schemes, including purchase of EVs for government fleet use; and
- Support for community-owned energy generation and retail projects.

## Opportunities in energy

The technologies exist to transition to renewables in a relatively short timeframe.<sup>34</sup> This transformation, if done properly with workers and their communities at the centre, can provide substantial opportunities in:

- New renewable energy generation and storage construction, operation and maintenance;
- Grid infrastructure upgrades (See map at right);
- Production of zero-carbon hydrogen – including coal to hydrogen coupled with genuine and 100% carbon capture and storage. The trial project underway in the Latrobe Valley could start a much-needed viable industry for this community, potentially creating thousands of jobs if given the opportunity;
- Mine and power station decommissioning. The Victorian Government should legislate to require the dismantling and restoration of industrial sites after closure;<sup>35</sup>
- Decommissioning of offshore oil and gas infrastructure as it closes (or, as is now becoming possible, conversion of platforms to hydrogen production); and

- Installation of renewable energy and storage in homes and commercial premises.

The Australian Energy Market Operator (AEMO) estimates that Australia requires 30-47 gigawatts of renewable energy to be constructed by 2040. This number could be substantially increased if Australia were to realise some of the potential of renewable hydrogen and become a renewable energy exporter. There are currently 30 gigawatts of solar and wind projects with planning approval. Bringing these forward with the right policies would deliver 50,000 direct jobs across the country (many in Victoria) and many more indirect jobs.<sup>36</sup>

While these are some of the opportunities directly related to electricity production, ensuring the job futures of workers and economic wellbeing of communities will also require economic diversification into other activities and sectors.

# TRANSPORT

- Expansion of public transport, providing large numbers of jobs in the construction phase, and more ongoing jobs in the operations and maintenance phase.
- Reinstatement and expansion of regional and interstate rail lines, including freight lines, providing better economic diversification opportunities for regional communities undergoing transition;
- Manufacturing of electric or fuel cell vehicles and supporting infrastructure, such as charging stations.

*Transforming the way our urban areas are designed to reduce the reliance on cars will have health benefits, reduce household expenditure on fuel, and provide job opportunities for urban planners, designers and architects and public transport workers.*



# AGRICULTURE

The main benefits in the agricultural sector from taking necessary climate action include avoiding further harm, reducing the threats to workers' jobs and health, and preserving a viable food production industry. But reducing emissions would also bring opportunities:

- Enable Victoria to grow its sustainable, high quality agricultural production, with increases in direct farm and supply chain jobs;
- Enable regions to build on their agricultural specialisations, such as the food and fibre work being carried out by the Latrobe Valley Authority in Gippsland;
- Building a supply chain from field to table for indigenous foods, including propagation of food plants, with guaranteed ownership by and participation of A&TSI workers and communities;
- Reduce the threat of destruction to land, production and jobs from drought, fire and extreme weather;
- Ecosystem restoration (including after fire damage) and mass tree planting;
- Growing and processing of medicinal cannabis, which could be integrated into the existing poppy processing industry; and
- Growing and processing industrial hemp, which has many uses, ranging from clothing to brake linings.



# CONSTRUCTION

Improvements in the energy efficiency of buildings could reduce Australia's energy use in buildings by 50%, reduce energy bills, and make for more productive workplaces and healthier homes.<sup>39</sup>

Decarbonisation of this sector will provide major job opportunities, including:

- Production of low-carbon cement, and other construction materials;<sup>41</sup>
- The large-scale expansion of the steel industry to make green steel using hydrogen produced with renewable energy-powered electrolysis. Australia is probably the best placed nation in the world, with our large renewable energy resources, to develop a green steel industry;<sup>42</sup>
- Energy efficiency upgrades to existing buildings have the potential to be a major source of job opportunities. It is estimated that if Australian governments were to implement policies to accelerate energy efficiency in buildings, 34,000 new jobs could be created in residential energy efficiency alone. There are a further 86,000 potential jobs in commercial and industrial energy efficiency;<sup>43</sup>
- Decarbonisation of energy supply will be vital to the maintenance of aluminium and other materials production in Victoria. Global aluminium manufacturers in particular are looking for low-carbon energy sources to power their smelters. Unless reliable low-emission energy can be provided for the Portland smelter, its future is likely to be subject to constant debate;<sup>44</sup>
- Recycling of building materials could create substantial numbers of new jobs given the low level of recycling that currently takes place;
- Large-scale expansion of social and public housing (see below);
- Changes in the occupational scope of existing jobs, with training required in new construction technologies;<sup>45</sup>
- More technical jobs particularly in the installation of renewable energy systems;
- Improved regulatory requirements around energy efficiency for new buildings;
- Government construction procurement should

include requirements for use of sustainable materials and construction practices, and

- Large-scale projects should be required to have union environmental officers on site to monitor sustainability of materials and construction practices, both creating further jobs.

Additionally, a large-scale expansion (at least tens of thousands) in social and affordable housing is needed to deal with homelessness and housing affordability problems. Victoria has one of the lowest amounts of public housing amongst the Australian states with an estimated 82,000 people including children waiting for secure housing.<sup>46</sup>

This expansion of public and social housing could be used to build more energy efficient homes, reducing CO2 emissions and reducing household energy costs, while creating large numbers of jobs in construction. Further jobs are created after construction as social workers and public servants are needed to manage and work with those tenants to ensure their ongoing health and wellbeing.

Major reductions in greenhouse gas emissions and improvement in the quality of urban environments can be obtained by improvements in housing and urban design. Siting and orientation of houses on blocks to maximise solar performance, location of windows, provision of eaves and other simple measures can make a substantial difference to the thermal performance of houses. Integrating renewable energy, grey water recycling and green spaces into medium- and high-density housing are important to reducing CO2 emissions and the cost of running a household.

Building a concept of community into housing developments, whether apartment blocks or areas of separate houses, can produce more socially-connected neighbourhoods, with flow-on benefits in terms of reduced isolation, greater community safety and neighbourhood pride. On a larger scale, improved urban planning that ensures that public green spaces and street trees, local shops, walking and cycling paths, and urban transport are integrated with housing developments will help to improve environmental amenity, ameliorate the urban heat island effect, and reduce car dependency. All of this can provide good jobs in housing and urban design, park maintenance, public transport and so on.

# MANUFACTURING

- Legislate to phase in a target of 75% of national demand for petroleum, diesel, and aviation fuel is refined domestically to ensure continuity of capacity and work through changing energy technologies.
- Institute a guarantee for renewable hydrogen so that 100% of domestic demand is produced and refined in Australia
- Identify all supply chain shortfalls to mitigate against production delays and stoppages due to emergencies like global pandemics.
- Green steel using renewable power to produce hydrogen;
- Improvements to manufacturing processes, such as the CSIRO's "dry slag granulation process", which harvests blast furnace waste and converts it into a granulated product for use in cement production, saving water, heat energy and greenhouse gas emissions;<sup>47</sup>
- Green aluminium through use of hydrogen or renewable power;<sup>48</sup>
- Renewable energy products, ranging from hot water systems to wind turbines, from batteries to solar panels;
- Electric bikes, scooters and vehicles;
- Locally made supplies, adequate to deal with emergencies like pandemics;
- Innovative, low-carbon industrial products of various kinds;
- Green building materials, with requirements to include locally manufactured green building materials in construction projects would assist the maintenance and growth of the sector.
- Wood product manufacturing including products from modern processes such as cross laminated timber in recognition of the drive to lower embodied energy in buildings.

Expanding renewable power and heating in existing manufacturing facilities, regardless of specific industry, is vital. For instance, the United Workers Union's dairy members are looking to claim for this in regional Victoria as part of their next round of collective bargaining in order to deal with both the threat of climate change to their jobs (there are already dairy factories closing because of this) and the cost of energy.

Energy Transition Hub at the University of Melbourne estimates that the creation of a zero-carbon metals industry in Australia would create over 65,000 jobs and \$100 billion in export revenue.

## ***Securing the future of aluminium smelting in a low-carbon Victoria***

*Alcoa's Portland aluminium smelter not only produces aluminium and provides hundreds of jobs in Western Victoria, it serves an important function of stabilising the electricity grid at times of high demand. Aluminium smelters are very high users of electricity, so if their "pots" are turned off for short periods – usually they can't be turned off for much more than an hour – they can reduce load demands substantially, a very helpful service provided to the grid during periods of peak demand. New technologies are becoming available to reduce smelters' energy use and, more importantly, give them much more flexibility in the way they can be used in demand reduction strategies. If the Portland smelter were retrofitted with this technology (at a payback period of between one and three years), and its supply of energy sourced from renewable generators, it would assure its future in the global aluminium supply chain, provide a vital grid stability mechanism, and provide savings and new sources of income (through payments for grid services) for the company.*

# WASTE

Reducing waste and developing a circular economy represent very significant new economic and job opportunities. The Victorian Government estimates that its new recycling plan will create 3,900 jobs over the next ten years.

Job creation opportunities include:

- Increased levels of recycling, with new jobs throughout the recycling supply chain;
- Government procurement to encourage investment in and viability of closed loop recycling (for example, procurement of locally produced photocopy paper made with recycled inputs and subsequently recycling for reuse in the same facility);
- New high-tech manufacturing processes in circular economy industries;
- Increased numbers of jobs for industrial designers;
- Greater demand for education and training for new processes and technologies<sup>52</sup>; and
- Resource recovery through investment in appropriate waste to energy facilities that reduce the need for landfills, while not detracting from recycling and waste reduction as primary priority.

# SHIPPING

- Develop fast passenger and vehicular ferry services among regional ports and to the Port of Melbourne or Hastings;
- Improve Commonwealth legislation to promote the use of coastal shipping, and modal shift of freight to shipping to reduce transport emissions;
- Develop zero-emissions ships using new fuels such as hydrogen and ammonia;
- Establish a strategic fleet by the Commonwealth, including an offshore wind construction vessel and an emergency response vessel to protect and supply coastal communities during bushfires or other crises;
- Ensure that the future decommissioning of Victorian offshore oil and gas facilities is undertaken to the highest standard that delivers the best possible jobs and environmental outcomes; and
- Require ships docked in Victorian ports to plug into a shore-based power supply (cold-ironing), and ports to provide this electricity infrastructure using renewable energy.

If Australia develops an offshore wind industry, there will be a need for a fleet of vessels for construction and maintenance. Victoria should aim to be the leader in offshore wind and seek to procure a strategic fleet of vessels for the industry. Renewable hydrogen and ammonia are likely to be major exports for Australia, with the need for specialist vessels and crews. A hydrogen transport fleet should be developed by Victoria. Further, a hydrogen manufacturing plant that directly links to a dedicated hydrogen export (national and international) berth should be established.



# EDUCATION

Much could be done to reduce the carbon and waste footprint of Victorian schools, TAFEs, universities and adult and early childhood education facilities. However, the main role for education in the climate transformation is in the provision of education about climate change and training for new skills and jobs.

Climate change action will increase the already strong demand for education and training, with individuals needing new skills to operate in rapidly changing industries and a low carbon economy. In TAFE, specific industry qualifications should incorporate training around strategies, design, material use and technologies focused on zero emissions.

## PUBLIC SERVICES

- End all forms of public sector austerity, privatisation and outsourcing;
- Increase direct public sector employment to reduce unemployment and to provide socially useful work in, for instance, renewable energy, community renewal and ecosystem recovery;
- Provide new public sector jobs in areas undergoing transition and facing job losses in other industries;
- Improve funding for social care services and other community agencies;
- Establish fully funded Community Resilience Projects across the state,
- Increase government (state or local) provision of child care;
- Improve funding would enable conservation areas (such as the River Redgum National Park) to play a more effective role in ameliorating climate change;
- Increase funding for forest and fire management, including additional investment in maintenance personnel and equipment levels adequate to manage fuels 12 months of the year
- The state's public housing stock needs considerable renovation and new construction. This could create thousands of jobs while improving the living conditions of public housing tenants. A concerted effort to increase the energy efficiency of public housing, and its access to renewable energy would create jobs and reduce costs for housing tenants.

## HEALTHCARE

Sustainability Victoria reports that in 2017-18 Victorian public health services generated approximately 35,000 tonnes of solid waste and of this approximately:

Shifting to the new climate-friendly economy will require a substantial revaluation of this work, with the importance of such socially useful jobs reflected in improved terms and conditions of employment, including reductions in insecure work, paid leave and higher wages.

- Incorporate the goals of Global Green and Healthy Hospitals (GGHH) into healthcare;
- Ensure that Healthcare is treated as an independent sector in zero emissions targets for 2050 with ministerial appointment overseeing same;
- Employment of fully funded and dedicated sustainability officers in public healthcare institutions to oversee mandated and funded emissions reduction strategies and targets;
- Increase use of renewable energy, through direct installation and PPAs, in health care facilities;
- Public health services should remain in the public sector. All health services should be subject to Government regulation and accountability with remuneration, conditions of employment and other entitlements comparable across sectors;
- Extend mandated nursing and midwifery ratios to private and not for profit health sectors;
- Mandate minimum use of recycled product in capital works;
- Include healthcare in national and state waste reduction and recycling strategies which must include circular economy principles and recycling activities that are compatible with material recovery facility operations. In Victoria, this means healthcare recycling that is compatible with Recycle Victoria; and
- Onshore manufacturing of healthcare equipment and products, including ventilators and PPE.



# TRANSITION FROM CRISIS ACTION PLAN

## WHAT VICTORIA CAN DO RIGHT NOW:

1. Ensure that government processes for the procurement of renewable energy require engagement with unions to provide good, secure jobs, decent pay, safety, training and apprenticeships
2. Develop industry plans with each sector, unions and workers
3. Establish a statewide Just Transition authority
4. Finance and build publicly owned renewable energy
5. Invest heavily in women-dominated care sectors in impacted communities to provide local economic and social benefits
6. Provide security to workers in fossil fuel industries with salary compensation packages and job transfer schemes
7. Upgrade transmission lines across Victoria and Australia
8. Back an offshore wind energy sector
9. Build a circular economy for our waste and recycling sector
10. Fund a massive expansion of social housing and a massive upgrade of public housing to make it energy efficient and help tenants save on energy costs
11. Roll out electric vehicle charging infrastructure and ensure the government vehicle fleet transitions to low-emission or no emission vehicles.
12. Support large-scale industry to transition to renewable energy and alternative fuels, including green hydrogen, as a means of revitalising our industrial capacity.
13. Invest in the public sector, including in an enhanced public health response capacity.
14. Invest in job creation in ecosystem recovery, especially to deal with the legacy of bushfire disasters, and in carbon farming.
15. Apply consideration to the gendered impact of transitioning industries. Employment and training policies for new and transitioning industries should include specific pathways for women entering the sector as well as retaining women once they enter the industry.

