

Jobs After Coal: a just transition for coal mining communities

Coal mining communities in New Zealand and elsewhere have faced major disruptions in recent years. Falling international coal prices, the Pike River tragedy, changing markets with declining demand, poor management and a high exchange rate have caused major uncertainty and significant job losses. Around the world, the coal industry is contracting. Prices have fallen to where many mines are no longer economic. Coal is a sunset industry, and coal towns urgently need new options. Coal demand is shifting, with renewable energy becoming much cheaper and competitive, and concerns about climate change putting pressure on fossil fuels, particularly coal.

We are at a transition point from an old, dirty economy to a new, clean future that replaces coal with renewable energy and coal mining jobs with clean energy, low carbon jobs.

Such transitions always cause disruption, and it is the workers and communities that depend on the old industry for their prosperity that most often bear the brunt of the disruption. It need not be that way. In its report *Jobs After Coal: a just transition for coalmining communities* Coal Action Network Aotearoa (CANA) outlines a Just Transition to a low carbon economy that does not leave workers in the lurch.

Many people argue that we must continue to open new coal mines because of the social and economic benefits the jobs bring. That argument places limited short term jobs ahead of the long term detrimental climatic effects of digging up and burning more coal. It also overlooks the social disruption that results from coal mining's boom and bust economy. The boom and bust nature of coal mining delivers social disruption to communities.

Coal Action Network Aotearoa (CANA) has never argued for the closure of an existing mine or the loss of an existing job, unlike Solid Energy which responded to a drop in the price of coal by dismissing half their workers.

SECTION ONE examines the role that coal plays now in our economy – and finds the jobs it currently provides are relatively few, and that little of the wealth coal mining generates stays in those coal mining communities.

- We find that despite the coal industry's claims of employment and prosperity, most of New Zealand's mining communities are a lot worse off than other towns and communities in their region. Only two mining communities in the entire country have higher median incomes than their surrounding district and only one has higher employment.
- We look at the health impacts of coal where combustion of coal contributes to four of the five leading causes of mortality in the United States (US): heart disease, cancer, stroke, and chronic lower respiratory diseases.
- Mining does not employ as many people as is often thought. Our research shows there are about 1148 people employed directly, and as contractors, by the mining industry. This compares with nearly 40,000 jobs lost in manufacturing alone over the past five years, with Government doing nothing to stem the flow.

SECTION TWO looks at the drivers of change – the reasons coal mining is under severe pressure and why it needs to be phased out worldwide.

- The price of all types of coal has dropped significantly, and many market commentators are saying it's unlikely to rise again, for a variety of reasons, such as major shifts in China to cut pollution, and the increasingly competitive price of renewable energy. This has led to massive layoffs at Solid Energy and Bathurst to delay its development of the Denniston mine.
- Climate change concerns and divestment campaigns are now becoming mainstream as the threat of a "carbon bubble" looms.

SECTION THREE sets out the energy that coal provides in NZ and shows it is relatively easy to replace with other energy sources. The phase-out of coal raises four questions, which are interrelated:

- What will we use for energy instead of coal?
- Where else can miners use their skills?
- What kinds of economic development could replace the role coal exports play in our economy?
- How can communities which are heavily reliant on coal for prosperity and jobs find other sources of economic activity?

There is no one answer, but there is a jigsaw of many pieces from which to construct a new future. Coal provides very little of New Zealand's energy, and it is readily substituted by renewable sources – geothermal, wind and solar for electricity; wood chip from logging waste for boilers.

SECTION FOUR outlines the jobs that could be developed in energy efficiency, renewable electricity, renewable industrial fuels, building state houses, horticulture, local food production and public transport. It looks at the skills miners have and ways these skills could be utilised.

Mining skills are diverse - engineering, loader and digger driving, electrical work, water and waste water management, health and safety, soil rehabilitation, welding, blasting, accountancy, secretarial work, administration, carpentry, rescue staff, first aid, fire prevention, chemistry, geology, hydrology and more. These skills can be used in quarrying, construction, house building, the forestry industry, the railway workshops, and many other areas of the economy.

We find there are many new sources of economic activity for communities moving out of coal mining.

- New Zealand could have thriving job-rich industries in energy efficiency, renewable energy, construction of public transport systems, and expanded horticulture.
- New climate-friendly technologies developed in New Zealand can strengthen wood to replace steel and concrete in buildings, reducing the huge quantities we currently export as raw logs.
- Logging waste can replace coal as boiler fuel and eventually replace petrol as transport fuel.
- Longer term there is scope for wood-derived chemicals. Wood is New Zealand's key strategic advantage for a low carbon economy, yet Government emphasis remains with fossil fuels, an economically risky choice.

These new economic opportunities won't just arise spontaneously; they must be planned for in advance. Crucial to this process is central government guidance and funding together with local planning which includes all stakeholders.

SECTION FIVE proposes a planning process for a Just Transition away from coal to new industries and new jobs, where communities are supported to take control of their own future. We propose a process for a "Just Transition" – a term used around the world for moving to a new economic future, where workers, their families and their communities have options. Crucial to this process is central government guidance and funding, together with local planning that includes all stakeholders.

SECTION SIX includes case studies from overseas and a scenario for how these ideas could be applied at a regional level on the West Coast. Many communities reliant on a single commodity have reinvented themselves. Communities in France, Scotland and the US have found:

- there are, in fact, jobs after coal
- they can be high quality and much more numerous than the jobs mining provides now
- they are under the control of local communities; more of the profits stay in the local economy
- they can lead to a more stable, environmentally sound economy
- they will not happen without a planned transition

We need to start planning now so that communities are empowered to plan their own future.

Key points from report

- Coal provides less than 10% of our primary energy in NZ
- About 1100-1200 people are employed by coal mining in NZ
- The international coal market is over-supplied. China is making less steel and recycling more. They plan for their coal use to peak within 5 years then decline.
- The cost of renewable energy has dropped 50% since 2008. In 2013 the US solar industry employed more than the coal and gas industries combined.
- No analysts expect the coal price to rise before the end of 2015 and maybe not then. Mines are being closed in Australia by BHP Billiton, Rio Tinto and Anglo American.
- Bathurst needs ~\$160/tonne to be profitable. Price is currently ~\$107.
- Coal is the biggest contributor to climate change.
- To stay below two degrees of global warming, which is already dangerous, the world cannot burn more than 20% of the fossil fuel resources currently available.
- Major international banks are refusing to fund coal-fired power stations.
- A low-carbon economy would provide new jobs in:
 - Building geothermal and wind power stations (already consented) to replace Huntly;
 - Retrofitting buildings and industrial plant for energy efficiency;
 - Installing solar electricity;
 - Recovering, drying, chipping and transporting wood waste currently left in the forest, to replace coal in industrial boilers, and eventually in steel making;
 - Manufacturing new strengthened wood products to replace steel and concrete in buildings;
 - Building better rail systems; and more
- This will not happen without planning. It requires the involvement of all stakeholders: industry, unions, iwi, councils, polytechs, ngos, with central government assistance
- The report describes communities overseas which have successfully transitioned from coal to new sources of prosperity. See coalactionnetwork.org

Key Recommendations:

Government should:

- Cease all subsidies to fossil fuels, increase royalties on coal, oil and gas, and transfer that funding to the transition process;
 - Set up a unit within MBIE to assist coal mining communities with the transition to a new economy. This unit should help with research, resource the process of community planning, and provide people on the ground who can give guidance and share information with those planning an alternative future;
 - Put a sufficient, stable price on fossil carbon that will make fuels from waste wood competitive with coal;
 - Increase funding for Research & Development to at least the OECD average, prioritising low carbon technologies;
 - Factor in all costs and benefits when letting government contracts for goods and services so that the cost of losing jobs and economic activity when procurement is sourced overseas are part of the equation;
 - Amend the RMA so that new coal mines are a prohibited activity.
- * All political parties should sign an agreement (as in the UK) whereby they:
- Acknowledge the moral necessity of significant carbon reductions so that emissions are on track to keep the world within 2 degrees warming this century
 - Take responsibility by committing to policies and targets which will significantly reduce emissions, regardless of who is in government.

Who is CANA?

Coal Action Network Aotearoa is a voluntary NGO dedicated to the phase out of coal because it is the main contributor to climate change. We wish to do this by allowing existing mines to run their course with no loss of existing jobs, but to prevent new mines from opening. We are committed to a largely coal-free Aotearoa by 2027, the date by which the permits of most larger mines expire.

So that miners and their communities are not left to bear the brunt of the change we are committed to a planned Just Transition, resourced by central government, where all stakeholders collaborate to plan a new source of prosperity for their communities.