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Green is good, but at what cost?

CLIMATE INSTITUTE STUDY ON CLEAN ENERGY JOBS

On Monday 28 February 2011, the Climate Institute, an Australian interest group, released a study that claims that a 25% reduction on 2000 level greenhouse gas emissions by 2020 would be positive for regional economies because it will generate over 30,000 jobs. In this bulletin, Frontier (Australia) provides a critique of this claim.

The Climate Institute's study released in Australia on Monday 28 February claims that a 25% reduction on 2000 level greenhouse gas emissions by 2020 would be positive for regional economies because it will generate over 30,000 jobs.[1] Unfortunately, the Climate Institute misses the point of a carbon reduction scheme – to reduce emissions, not create jobs. Further, and crucially, it fails to identify the net impact on jobs, does not consider whether "green" jobs will manifest in Australia or overseas, and glosses over how costly any new jobs will be.

MEASURING THE NET EFFECT ON JOBS

To derive this estimate of job creation the Climate Institute's consultants first worked out how much extra renewable energy sources would be required to meet a 25% target. This was based on the electricity sector modelling of the

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"Garnaut25" scenario conducted for the Australian Treasury. To work out jobs created, the consultants simply multiplied the capacity installed by some 'factors' specific to each technology. Then they add up the jobs. The consultants work out that a total of 31,743 jobs are created.

Unfortunately, this is simply voodoo economics revisited and only a half-truth. The jobs in question are only new jobs to the extent that the people employed in them could not have worked elsewhere. To show that it is better to put these people into green jobs, one would have to demonstrate that the economy is better off shifting people into these jobs at the expense of jobs in other sectors. The study does not attempt to do that. All the study shows is that if you subsidise green jobs, then you should expect to see more green jobs, much as if you subsidised investment in sausage factories you would expect to see an increase in jobs making sausages.

This type of partial analysis is flawed since it does not include any estimate of jobs lost in other areas, wages effects, or national income effects; hence there is no estimate of the cost involved in the creation of these jobs. The truth is that Australia will suffer job losses in ***net terms*** following any meaningful cuts in emissions. This is because Australia is a small, trade exposed, energy intensive economy.

The Australian Treasury conducted detailed modelling on the impacts of a carbon pollution reduction scheme, but did not release analysis on job impacts. You can find these results in *Australia's Low Pollution Future* at: http://www.treasury.gov.au/lowpollutionfuture/. Using the same very detailed general equilibrium macro-economic methodology and assumptions as Treasury, Frontier (Australia) found that Australia will suffer a net job loss of about 37,000 by 2030 with just a 5% cut in emissions. (See: http://www.frontier-economics.com/europe/de/news/783/). Even then workers will have to take a cut in real wages of over 3% to keep job losses to this level. So while green jobs might appear, jobs in other parts of the economy will fall by more.

ALL JOBS ARE NOT EQUAL

Even if we accepted the Climate Institute's estimate of green job creation, we can compare this against the loss in per capital GNP to deliver these jobs to derive an implied 'cost per job'. This sheds light on how effective a carbon price might be in creating jobs. The Treasury report GNP per capita in Chart 6.9 of *Australia's Low Pollution Future*, which you can find at the link above. In 2020 the Reference case Gross National Product (GNP) per capita is $55,900, while the Garnaut25 GNP per capita is $54,700. Recall that the Climate Institute rely on the electricity modelling of this scenario. This is a reduction of $1,200 per person. For a population of 24.9 million in 2020[2] this equates to $29.9 billion or around 2% of total GNP. If we divide this lost GNP by the Climate Institute estimate of 31,743 jobs created, ***this equals $941,300 per job***. This is just the loss in GNP by 2020, compared with the Climate Institute estimate of jobs created by 2030 when we can expect the cost per job to be even higher.

We do not claim that this is the actual cost per job created, as it does not take into account the value of emissions avoided. This is more to demonstrate the serious flaws in conducting the sort of partial analysis the Climate Institute have undertaken. The point is that the objective of a carbon price is to reduce emissions; it is a very inefficient tool for creating jobs.

AUSTRALIAN JOBS?

Another problem with the estimate is that it includes construction and manufacturing jobs, and appears to assume that all manufacturing jobs will be Australian jobs. While Australia may have excellent resources to ***deploy*** wind and solar generation, that does not mean that Australia has any comparative advantage in the ***manufacture*** of these facilities. Globally, European, American and Chinese firms dominate the manufacture of wind turbines and solar photovoltaic panels. This suggests that we should not rely too heavily on Australian manufacturing jobs arising from assistance to these sectors. Although it may not prevent us from deploying them in Australia, if the objective is job creation in Australia, they will be very expensive jobs.

CONCLUSION

The objective of a carbon price is primarily to reduce emissions, not necessarily to provide industry assistance. To claim that it is about job creation is missing the point.

None of this is to argue against the need for a price on emissions, an idea that Frontier (Australia) and many others have long supported. However, the costs of implementing such a price need to be recognised and managed in a sensible way, particularly in a small, open economy such as Australia's. There are a variety of ways of doing this, but half-truths about job creation is not one of them.

Notes:

(1) Accessed 3 March 2011, see: http://www.climateinstitute.org.au/media-contacts/media-releases/789-pricing-pollution-and-clean-energy-policies-unlock-door-to-regional-australias-clean-energy-jobs-potential

(2) Australian Bureau of Statistics population projections Series B

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