

# **Mountaintop Removal in Appalachia, West Virginia**

## **Friends of the Earth Scotland Case Study Briefing**

May 2013

### **Introduction**

Over the last couple of decades, the drive for cheap energy has resulted in ever more extreme methods of extracting fossil fuels. On a global scale the price is paid in the form of climate change. But a more immediately devastating effect is occurring at a local level.

This has been the case with opencast mining, deep-water drilling, tar sands and more recently fracking, which have all proven to be hugely controversial. Another form of coal extraction has been taking place that has attracted less attention; it causes huge environmental destruction, dramatically alters landscapes and is linked to serious local health impacts. It's known as Mountaintop Removal (MTR), because it literally involves blasting the tops off mountains to access thin layers of coal embedded in rock.

Unsurprisingly, this is a highly controversial process in the USA where the technique has been pioneered. Perhaps more worryingly a Scottish bank is partly to blame. This is because our 82% state owned bank, the Royal Bank of Scotland (RBS), have been helping finance the corporations that do this horrific work.

This case study focuses on West Virginia in the USA where the process has been underway for decades, and is reported to have had terrible repercussions for local people and ecosystems. The evidence can be overwhelming and stark, with reports from local campaigners who believe, "RBS fund cancer, heart disease and birth defects"<sup>1</sup> through their investments in companies that operate in the Appalachia area.

### **Appalachia**

Appalachia is a large region in West Virginia, which is home to around 23 million people. Typically most of this population live in the large cities, although there is also a large rural population. There is a well-documented 'Hill Billy' subculture, which was traditionally (and somewhat offensively) characterised as being poorly educated, unemployed and poor.

Appalachia is best defined by its major industries: logging, tourism and coal. Logging is still a large player, although production peaked in the early 20<sup>th</sup> Century<sup>2</sup>. Tourism sits somewhat uncomfortably between logging and coal; the largest tourist draw to Appalachia is the region's National Parks. And of course there is Dollywood. These attract large numbers of tourists to the region who take advantage of the abundance of stunning mountain walks in the area.

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<sup>1</sup> Bob Kincaid, interviewed on 15<sup>th</sup> March 2013

<sup>2</sup> The Alliance for Appalachia: <http://theallianceforappalachia.org/background/what-appalachia/>

There has also been a history of underground coal mining in the area. Peak production has passed, but this has not put off the mining corporations from finding new and more harmful ways of producing extreme fossil fuels.

### **Mountaintop Removal Process**

Massive quantities of explosives are used to blast the top off the mountains to allow access to the coal. In the Appalachian Mountains explosives equivalent to that used in one Hiroshima bomb are detonated each week<sup>3</sup>. A warning system is in place for local residents, but the explosions are so frequent that they are blamed for damage to nearby dwellings and infrastructure<sup>4</sup>.

Huge quantities of debris are then dumped into the adjacent valleys. This 'valley fill' process effectively flattens the horizon, changing the landscape forever. Aesthetic qualities are the least of the problems for the local community. Tonnes of debris are being dumped which are laden with toxic chemicals that would otherwise have been locked within the mountain. The environment and ecosystems however, are not equipped to deal with these toxins. To exacerbate the problem, headwater streams run from these valleys, which feed the waterways of the south east of the USA.

Because of its toxic quality, coal extracted from the MTR process then has to be cleaned to make it marketable; customers could not accept coal that is covered in chemicals such as lead, mercury, chromium and arsenic. Water is used to clean the coal to an acceptable standard, and the resulting toxic slurry is then stored in vast lakes close to the excavation site. Storing toxic water in an area where huge volumes of explosives are being detonated is inherently problematic. Campaigners from the area have highlighted previous cases where dams in storage lakes have been breached, and found worrying signs of structural damage in dams in recent years<sup>5</sup>.

In Appalachia over 500 mountains have been flattened<sup>6</sup>, unleashing unknown volumes of toxins and dramatically transforming the landscape. In Scotland this would be like wiping out our 538 Scottish Munros.

### **Impacts on Health**

Numerous academic studies have been conducted on the health impacts of MTR on local populations<sup>7</sup>. These studies acknowledge that social and economic disadvantage are a factor, but even when these are controlled for, significant negative impacts are still reported on the local MTR communities. Research shows that babies are more likely to be born with circulatory/respiratory, central nervous system, musculoskeletal, and gastrointestinal defects<sup>8</sup>. Higher than normal prevalence in the adult population of coronary heart disease and heart attacks which has been directly attributed to air and water borne toxins release through the MTR process<sup>9</sup> and increased kidney disease<sup>10</sup> are also to be found in the literature.

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<sup>3</sup> Appalachian Voices: <http://appvoices.org/end-mountaintop-removal/mtr101/>

<sup>4</sup> Bob Kincaid, interviewed on 15<sup>th</sup> March 2013

<sup>5</sup> Washington Post, Many coal sludge impoundments have weak walls, federal study says. 24<sup>th</sup> April 2013: [http://www.washingtonpost.com/national/health-science/many-coal-sludge-impoundments-have-weak-walls-federal-study-says/2013/04/24/76c5be2a-acf9-11e2-a8b9-2a63d75b5459\\_story.html](http://www.washingtonpost.com/national/health-science/many-coal-sludge-impoundments-have-weak-walls-federal-study-says/2013/04/24/76c5be2a-acf9-11e2-a8b9-2a63d75b5459_story.html)

<sup>6</sup> Rainforest Action Network: Extreme investments: U.S. banks and the coal industry, page 7 <http://ran.org/coal-finance-reportcard-2013>

<sup>7</sup> Organized Voices & Empowered Communities (OVEC) has a large selection of relevant peer reviewed health impact articles: [http://ohvec.org/issues/mountaintop\\_removal/articles/health/](http://ohvec.org/issues/mountaintop_removal/articles/health/)

<sup>8</sup> Ahern, M., Hendryx, M., Conley, J., Fedorko, E., Ducatman, A., & Zullig, K.J. (2011) The association between mountaintop mining and birth defects among live births in central Appalachia, 1996–2003. *Environmental Research*. 2011.

<sup>9</sup> Hendryx, M. & Zullig, K.J. (2009) Higher coronary heart disease and heart attack morbidity in Appalachian coal mining regions. *Preventative Medicine*. 49, p355-359.

<sup>10</sup> Hendryx, M. (2009) Mortality from heart, respiratory, and kidney disease in coal mining areas of Appalachia. *International Archive of Occupational Health*. 82, 243-249.

## **Effects on Local Residents**

Bob Kincaid calls himself an “independent Hill Billy broadcaster”. The West Virginian has his own radio show that he utilises to campaign against MTR mining in Appalachia. He has been personally impacted by MTR, and has seen friends and family fall ill and die with associated illnesses.<sup>11</sup>

Bob remembers a time when Appalachia was a nice place to live. He says there were problems with inequality, it was very rural with many difficult-to-access communities but that was the lifestyle they chose and were accustomed to. That was until the MTR industry took over. Now they are unable to sell their land, and are stuck with highly polluting neighbours who “care more about their jobs than our lives or children”.

Bob’s family has lived on the same piece of land for nine generations, and he traces his roots back to Scotland. They have always regarded their Scottish roots with pride and looked fondly upon our shared history. Now he feels his family are being delivered a “kick in the teeth” by RBS.

Bob recounted a personal story; a rare brain disease affected five of his neighbours in one year. These neighbours were unrelated, and in the general population, this type of cancer strikes 1 in 100,000.

These ‘associated’ deaths are a high price to pay for not very much coal claims Bob. He says that while some may call these deaths ‘associated’ “we call them mom, dad ... friends”

Another threat to local residents and wildlife is from the sediment lakes that are used to store toxic water. In 2002 during a heavy rainstorm in Lyburn, West Virginia, an avalanche caused a dam to overflow, sending out tonnes of toxic sludge. This black tsunami flattened two homes and damaged a further ten. Local residents consider themselves lucky that the dam held.

## **Alternatives**

Campaigners in Appalachia have financed a feasibility study into constructing wind farms on potential MTR sights, which have shown that these would be suitable for installing wind turbines. Campaigners and the local community feel that, for them, a decision between MTR and wind turbines would be easy.

## **RBS Financing of MTR**

RBS are the UK’s number one financier of MTR, and number seven in the USA of lenders and underwriters<sup>12</sup>. When financing corporations that undertake these operations, RBS do not have to disclose full amounts given. From the minority of what *has* been reported, we can ascertain that RBS have lent over \$120 million since 2010<sup>13</sup>.

RBS is a business that makes money partly by giving out loans to companies, which they pay back with interest. This is fairly straightforward, and normal banking practice. It gets slightly more complex as RBS choose to distinguish between two different types of loans that it can give out to business. These can be either ‘project’ financing or ‘corporate’ financing. ‘Project’, as the name suggests, would be financing for a specific venture - for example building of a school or hospital. With corporate financing RBS lend out money to an organisation that can use the money for a variety of different projects or its own development.

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<sup>11</sup> Bob Kincaid, interviewed on 15<sup>th</sup> March 2013

<sup>12</sup> Rainforest Action Network: extreme investments: US banks and the coal industry, April 2013. <http://ran.org/coal-finance-reportcard-2013>

<sup>13</sup> Bloomberg

Alpha Natural Resources Inc.: <http://www.bloomberg.com/quote/ANR:US>

Arch Coal Inc.: <http://www.bloomberg.com/quote/ACI:US>

See also: U.S. Securities and Exchange Commission: <http://www.sec.gov/edgar/searchedgar/companysearch.html>

RBS are now quite selective about the project financing that they undertake as they concede that this is more directly attributable to them. However they act with significantly less care when lending out money to corporations. It is through this type of arrangement that they financed the tar sands and this is also how they finance MTR. RBS then claim that they are not *directly* financing these projects and therefore are not responsible for any consequences. RBS point out that the money they invest does not all go into the project per se; it can be used for a variety of projects or for the development of the company through internal investment.

However the fact remains that if banks like RBS didn't finance the corporations that undertake such devastating work, activities like MTR would not go ahead.

### **RBS in Scotland**

Since RBS was bailed out in 2008 by the UK taxpayers to the tune of £42 billion, we have had a share of 82%. Given this very privileged position, FoES and other campaigners argue that it should be acting in our best interests and taking responsible decisions that will not further degrade our planet.

Over the last five years RBS have been accused of financing numerous projects/corporations that undertake environmentally destructive projects. These include tar sands, Arctic drilling and other unconventional fossil fuel projects.

### **What FoES are calling for**

We acknowledge that RBS is still operating in a difficult financial period. However, as a state owned bank, RBS has a duty to ensure that its practices are in our best interest, and be completely transparent in their financial activities. *RBS should not be lending money to corporations that predominantly work on extracting fossil fuels.* This is financing an unsustainable future. Instead RBS should be leading the transition to a green economy, to tackle the growing threat of climate change.

We call on RBS to join the growing number of banks who have excluded MTR lending from their portfolio. Amongst these are Commerzbank, Credit Suisse & UniCredit. We call on RBS to lead the way and become a truly sustainable bank that only finances projects and corporations which endeavour to make the planet a nicer and safer environment for us all.

According to World Development Movement, RBS finance fossil fuels to the tune of £35.5bn<sup>14</sup> – this is money that is known about and declared, there is further still that is not known about. Alongside other campaigning organisations, FoES is calling for RBS to come clean about all its investments.

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<sup>14</sup> <http://www.wdm.org.uk/carbon-capital/nexus>