

# ***"The Institute"***

**North of England Institute of Mining and Mechanical Engineers**



**Newsletter for Winter 2023**    **issue no. 11**

***Welcome to our Newsletter, giving you up to date information on events, lectures and matters of interest.***

**Editorial - by Editor Steve Martin**

The Institute has been busy over 2023, moving forward to secure our updated Royal Charter, and you will have been receiving our new email Newsletter giving details of what we have been doing. In June we were very successful with our Joint 2 -day Conference with the Institute of Corrosion, "Integrity Engineering for a Sustainable Future" including a visit to Offshore Renewable Energy (Catapult) in Blyth, and Charlotte Adams showed us the settling ponds at Bates Colliery. The Lecture in October was advising of the research in Advanced Steels in the Nuclear Industry, by Dr Peng Gong of Newcastle University. Our Speaker in November was Joseph Cherry on "where did Groundwater go" and was well applauded by those at Neville Hall.

Our own Les Turnbull will be launching his latest book titled "Willington Waggonway" and will show that the Stockton

## **In this Issue:**

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To Darlington railway was not the start, and promotes the reputations of William Brown, Richard Peck, John Watson and Christopher Bedlington and show their part in early railway development.

## Australia's pathway toward net zero is clear, but industry commitment needed



Solar farm at Rio Tinto's Gudai-Darri in Australia. *(Image by Rio Tinto).*

Existing technologies will enable Australia to halve emissions by 2030 from 2020 levels, under a rapid decarbonization scenario led by a renewable electricity sector.

A new report by the country's science agency CSIRO emphasizes that an accelerated transition is needed across the economy if the island nation is to meet the goal of net zero before 2050 and limit global warming to 1.5°C.

CSIRO's Rapid Decarbonization scenario projects key milestones in 10-year timesteps that would set Australia on a path to net zero by 2050.

Using existing technologies, Australia can reduce emissions by 52% from 2020 levels by 2030. Beyond that, however, technologies currently in early development would need to be in widespread commercial use into the 2030s and 2040s, particularly to address hard-to-abate sectors.

The report notes that the investment costs will be substantial, and the role of the finance sector will be critical. "Pressure is mounting for business to speed up its efforts towards net zero and lead the way for the rest of the country. How to move faster to deliver a cleaner, sustainable and stronger economy is the question on every business leader's mind," CSIRO's executive director—environment, energy and resources, Peter Mayfield, said in a media statement. "This work will help businesses find a rapid and achievable pathway to net zero appropriate to their sector—guiding investment to mitigate climate change, reinventing industries of old, and creating new jobs in emerging industries."



CSIRO researchers applied to an Australian context the International Energy Agency's global analysis of the technology, energy and investment needed to limit global warming to 1.5°C.

Modelling focused on the high emissions sectors of the economy to develop transition pathways across energy, transport, building and heavy industry, including steel, cement and aluminium alongside agriculture, the largest energy emitters in the economy.

With this focus, the Rapid Decarbonization scenario projects the national effort will be led by a renewable electricity sector:

Renewable sources would need to triple by 2030 to reach 90% of the electricity generation mix. To achieve this, almost all new capacity installed in the next decade would need to come from wind, solar and hydropower supported by increased storage capacity.

Rapid electricity sector decarbonization is projected to drive down emissions from energy use in housing and commercial buildings, followed by electrification in mining, and later in transport. This highlights the need for more renewable electricity sooner.

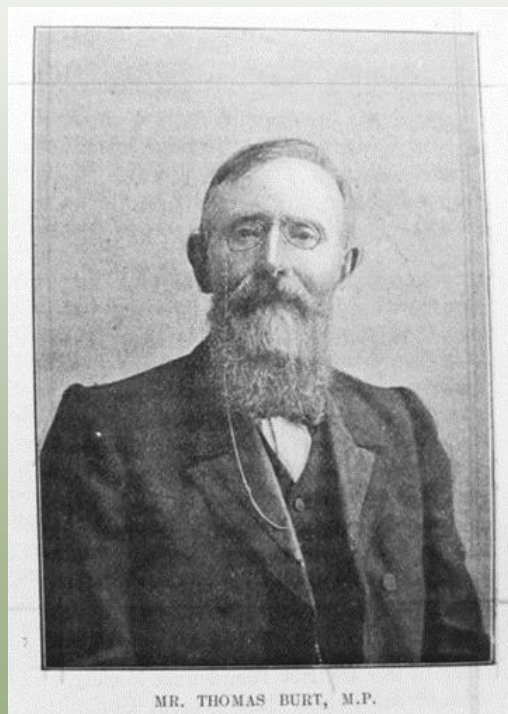
By 2040, 73% of cars and light commercial vehicles on the road will be electric-powered. Decarbonization of long-distance and heavy transport accelerates through 2030-2040.

According to the report, lagging behind international decarbonization would be a competitive disadvantage for Australia as other nations increasingly adopt low-emissions technologies and trade barriers towards high-emitting nations.

With thanks to [Mining.com](https://mining.com.au) for their permission to use this article.  
[Staff Writer](#) | December 3, 2023

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## Thomas Burt MP (12/11/1837 – 12/04/1922)



MR. THOMAS BURT, M.P.

Thomas Burt was born on November 12th, 1837, at a small group of cottages known as Murton Row. This was a row of 18 houses; each house was a single story cottage with a single door and window looking onto the wagon way running from Backworth to Percy Main. Soon after his birth his parents moved to Whitley (now Whitley Bay) but an explosion at the colliery where his father worked forced a move to Seghill. During the five years of this residence Thomas was sent to a Dame's school - these were small, privately run schools only for young children and were where a "school dame" (local woman) would offer a basic education for a small fee - from the 17<sup>th</sup> to mid 19<sup>th</sup> century this was the only schooling available to the children of working men.

His progress in learning was steady and successful. It was here that he had his first experience of labour troubles, as they were called. It was the year of the famous and disastrous coal miner's strike of 1844. All those miners on strike who lived in colliery houses were ejected from their dwellings, their furniture and belongings being deposited by the road side or on any available vacant ground, the only shelter from the elements being sheets of canvas stretched over their furniture and their cooking being done over open fires. These scenes, and the sufferings associated with them, stayed with Burt for the rest of his life.

The Burt family fortunately secured shelter in a cottage at the Avenue Head, Seaton Delaval however his father, having taken so prominent a part in the strike, was classed as a "sacrificed man" and was refused work when the strike was settled. This forced the family to move to County Durham to find work which they found at Brickgarth, Easington Lane (see image 1) where they stayed for about a year. They then moved to Haswell colliery, as Burt's father tried to find the best pay and conditions. During this time Thomas continued attending school and Sunday school, with his father intending him to do so for some time longer, but Thomas deemed it his duty to try and increase the family income, and at ten years of age went to work in the local mine.

It was at Haswell Colliery that he first started work as a trapper boy (opening and closing ventilation doors to allow the passage of full and empty coal tubs see images 2 & 3). Trapper boys were engaged to work 12 hour shifts, (mostly in the dark as candles, if allowed, were expensive) and he was not allowed to stray from his post. On one occasion Thomas fell asleep whilst a train of tubs smashed through the ventilation doors, although there is no record of what punishment was handed out to him for this mishap there is no doubt it would have been swift and severe! After Haswell the family moved on to Sherburn House, and finally, South Hetton again looking for the best conditions and pay.

Like most boys at that time he progressed to work as a “putter”, (see image 4) engaged in taking the tubs to and from the “hewer” and eventually he began to like his work, particularly his two years spent at Sherburn House colliery where, on the many occasions when the colliery was laid off he could enjoy his favourite pastime of “rambling”. When he was thirteen he and his father worked together at Murton Colliery (South Hetton) until it was decided to return to Northumberland. On returning to his native county with his family, he found work at New Hartley Colliery, Cramlington Colliery and finally onto Seaton Delaval Colliery in 1851.

Burt progressed onto hewing (see image 5) when he was 18 years old and resolved to work hard to earn as much money as he could. Because he was working a 14 hour day (12 underground and an hour travel from his place of work to home) his only hope of bettering himself was through self education and so Burt would save what money his mother gave him back from his pay to buy books. He would walk from home to Newcastle and back to purchase various classical books and also managed to learn French, Latin and even Pitman’s shorthand.

In 1859 he and his two uncles were dismissed from Seaton Delaval Colliery after a strike that he took no part in. They eventually found work at Choppington Colliery on the 1<sup>st</sup> January 1860 where he also met and, later that same year, married his cousin Mary Weatherburn.

Thomas Burt was a tee-totaller like his father Peter, who was a member of the Order of the Rechabites and a local preacher in the Primitive Methodist Church. Thomas would have learnt a lot about the rights and wrongs of life from his father and the numerous Primitive Methodist travelling preachers that stayed over in the family home. He became secretary of the District Temperance Society, and also of the School Management Committee, which consisted of an equal number of miners and colliery officials. This office indicated that he enjoyed the confidence of both parties.

In 1864 he was elected delegate to represent the miners of Choppington on the Northumberland and Durham Miners’ Association. Later he proposed the resolution for the dividing of the two counties for Trade Union purposes, and the separate organization of The Northumberland Miner’s Mutual Confident Association followed as a consequence. When the serving Secretary for the Association resigned from his role a meeting was held at the Astley Arms (now the Keel Row) Seaton Delaval on the 15 July 1865 to elect a new Secretary. Thomas Burt, though only a young man, was strongly recommended by the men of Choppington and other influential gentlemen who had an interest in the union. Thomas was duly elected and took up office on the 14<sup>th</sup> August 1865.

At the time of his taking office there was a serious “strike” in operation at Cramlington Colliery (the largest in the county) and after 16 weeks the evictions began and were carried out with the usual brutality of the Candymen (bailiffs) accompanied by mounted police. The Cramlington men set about the candymen and the women beat their bleazers (iron sheets used to draw a fire) to frighten the police horses. This worked for a short time but soon the ringleaders were arrested and imprisoned for up to nine months hard labour. The affairs of the Union were under a cloud, there was only £23 in hand when Burt took over the union and there were 600 men on strike, but fortunately all the other collieries in the county were working (some 4000 men) and funds were raised to support their striking colleagues. Thomas Burt advised the striking men to abide by the law of the land and maintain a peaceful attitude when the bailiffs returned. Soldiers from Newcastle and Manchester along with the candymen descended onto Cramlington village only this time the men left their cottages peacefully and the houses were cleared without incident.

The owners brought in strike breakers from Devon and Cornwall and the strike ended after 20 weeks in the November. Burt had managed to raise £4000 to support the men on strike and after their needs were met there was £600 in hand which was put aside for future needs.

After six-years the membership doubled. Although Burt's salary at the time was little more than he could earn as a hewer, there was an increasing amount of work, and he was subject to a great deal of back-biting and personal attacks at meetings. On April 3rd 1872 he issued a manifesto, at his own expense, in which he candidly said that, for himself, he did not care for the position he held: *“I came to you a free man, and I can only continue with you as such. I choose my own company. I shall correspond with whom I like. I claim to have, or that I ought to have, some little time to call my own, and this leisure I shall dispose of in my own way. I shall at all times claim the higher liberty of speaking as I think upon every question. I will never consent to become the mere tool and mouthpiece for any man, or any body of men”*.

Following this, his prestige rose even higher, his salary was increased, an assistant appointed, and proper offices found in Newcastle, with living accommodation attached. Up to that time, having quit his pit cottage, Burt had lived at Cowpen Quay, Blyth and worked from home. Thomas Burt was lucky that the new breed of coal owners were willing to try to avoid strikes and disputes by discussion, unlike previous union leaders Thomas Hepburn and Martin Jude who were met with a totally different attitude from the coal owners.



Thomas had displayed in his official capacity so much knowledge, tact, and business capacity that later in 1872 a movement was started for the purpose of sending him to Parliament. As few of the miners then had the right to vote, it required constant campaigning for two years to secure the privilege of voting, and when the right to vote had been won Thomas Burt declared himself for Labour and Radical policies, but actually stood as Liberal, and was elected in February 1874 as a Member of Parliament for Morpeth with an overwhelming majority. He was the first coal miner to enter the House of Commons.

Prior to this in February 1873 a Joint Committee, unique in the coal industry and perhaps in industry generally, was set up to settle all disagreements peaceably. Consisting of representatives of the coal owners and the men it would have been unimaginable a few years earlier. This was one of the great achievements of Thomas Burt's life. His union salary was increased to £500 p.a.

He presided as president of the Trades Union Congress at Newcastle in 1891. At the Congress the acoustics of the hall were appalling, and large numbers of delegates were present for the first time from the new mass-membership unions of unskilled workers. Burt did a marvellous job of keeping order and preventing aggravation throughout, and in particular persuaded Conference not to eject the inexperienced Kier Hardie and his supporters after they had breached standing orders during an important vote. He attended international labour conferences at Berlin, Joliment (Belgium) and Paris, and is credited largely with the success of the international co-operation amongst mining unions. Burt's performance as an MP was equally as impressive as it was in the trade union movement.

Thomas Burt had some years before, on April 3rd 1869, at Blyth, befriended Charles Bradlaugh (later to become a MP), inviting him home to supper when—although Burt did not know it till later—no innkeeper or coffee house proprietor would supply the notorious Atheist with any kind of refreshment. Bradlaugh won the election as MP for Northampton in 1880, but for five years was harassed and prevented from taking his seat on the grounds that an atheist could not take the oath; he was treated with discourtesy and brutality but stood firm and held his beliefs. Thomas Burt remained his staunch friend and ally throughout, maintaining that the electors had the right to choose who they wanted. The outcome of Bradlaugh's stand and Burt's support was that MPs and witness's in civil and criminal courts of different beliefs and religions to be allowed to affirm instead of swear an oath on the Bible.

Burt was of course active in labour and social legislation, including the old-age pension. In 1892 he became a government minister, Secretary of the Board of Trade. He took a great interest in South Africa, and opposed the Boer War as being the most disgraceful war we had ever undertaken.

. This was an extremely unpopular position to take, but he held his seat at Morpeth in the election of October 1900, albeit with a majority of only 410. In 1905 he visited South Africa with Mrs. Burt, partly to see their two sons, but also to see labour conditions for himself. In 1895, the new offices of the Northumberland Miners' Union were opened, and named Burt Hall (now part of Northumbria University see image 6). It was significant of the quiet revolution that Burt had accomplished that the opening ceremony was performed by the President of the Newcastle coal owners. In 1911 he received the honorary degree of Doctor of Civil Law of Durham University, the freedom of Newcastle, and the freedom of Morpeth. He retired in 1913 and died on 12 April 1922 at home at Burdon Terrace, Newcastle upon Tyne.

It was because of the dedication and campaigning by people like Burt that the lives of coal miners and their families changed for the better. When the working man finally had a voice in Parliament change had to come, it came very slowly, but come it would as the indefensible could not be defended.

One of Thomas Burt's favorite quotations was:  
 "Honour and shame from no condition rise;  
 Act well your part, there all the honour lies."

A trapper boys song: "Geordie Black" by Rowland Harrison  
*When aw was a bairn on me father's back  
 He wad tyek me away to the pit  
 An getting' in the cage, gannin doon below  
 Was enough to myek a youngster tyek a fit  
 To sit an keep a door, midst darkness and gloom  
 Aye, many an hoor by myself  
 An hear the awful shots that rummelled throo the pit  
 An lumps o noondy coal cum doon pell mell.*



Image 1: Brickgarth, Easington Lane showing a typical miner's cottage of a style the Burt family lived in.



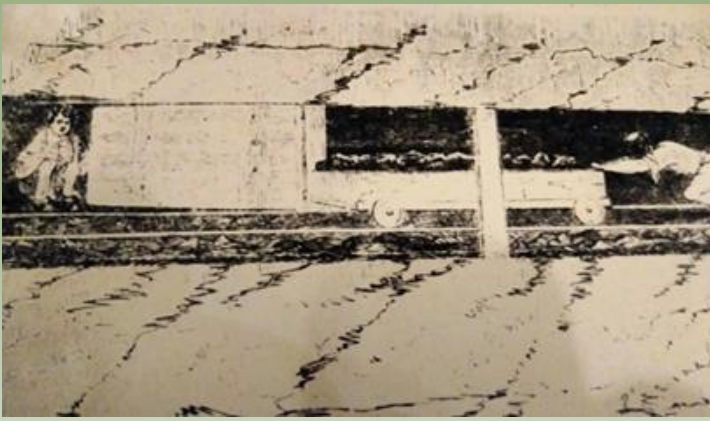


Image 2: Trapper boy on left

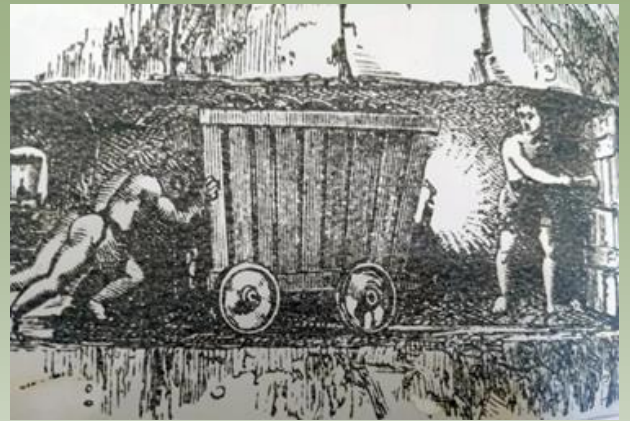


Image 3: Trapper boy on right

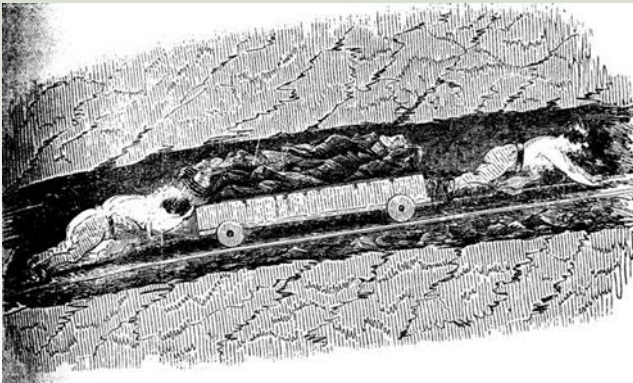


Image 4: Putters at work



Image 5: Hewer at work



Image 6: Burt Hall

With Thanks to John Fellows for this Article, and his long wait to see it in print



# Could there be a gold rush for buried hydrogen?



Earlier this year Professor Jacques Pironon was searching for methane in the Lorraine Basin, northeast France, when his team made an unexpected discovery.

Around 3,000m underground they found a very large deposit of hydrogen. "It is what we call serendipity," says Prof Pironon, research director at France's Centre National de la Recherche Scientifique (CNRS) at the University of Lorraine.

Not long ago such a find would have been of academic interest only, but these days it creates a stir.

That's because many think hydrogen will be an essential fuel in years to come. They argue it could be the key to moving the global economy to net zero, as hydrogen does not produce CO<sub>2</sub> when used as a fuel or in industrial processes.

But the big drawback with hydrogen is that, at the moment, most ways of producing are not green at all.

According to the Carbon Trust, less than 1% of current global hydrogen production is emission-free.

There is grey hydrogen - produced by splitting methane into carbon dioxide and hydrogen (H<sub>2</sub>). Blue hydrogen is produced the same way, but the CO<sub>2</sub> produced is captured and stored.

Black hydrogen is produced by partially burning coal. Green hydrogen, that elusive 1%, is created through the electrolysis of water into oxygen and hydrogen.

But green hydrogen is relatively expensive and in short supply, so any other emission-free supply of the gas would be welcome.

Known as natural hydrogen, gold hydrogen or white hydrogen, natural deposits could be an important source.

They are produced in a number of ways but the main process involves the interaction of ground water with iron-rich minerals such as olivine. This causes the water to be split into oxygen, which binds with the iron, and hydrogen.

The French discovery is not the first time that naturally-occurring hydrogen has been found - there's already a small well in Bourakébougou, western Mali, and there are also believed to be large deposits in the US, Australia, Russia and a number of European countries.

However, the discovery in France is believed to represent the largest naturally-occurring deposit of the gas ever found. Prof Pironon estimates there could be 250 million tonnes of hydrogen, enough to meet current global demand for more than two years.

There could be many more hydrogen deposits lying undiscovered around the world - the US Geological Survey (USGS), estimates thousands or perhaps billions of megatonnes.

Not all this will be readily exploitable, cautions USGS research geologist Geoffrey Ellis, who has modelled the amount of geological hydrogen.

"This is the global model, and the vast majority is going to be inaccessible - too deep or too far offshore, or in accumulations that are much too small for it to ever become economical to actually access," he says.

But the USGS estimates that there is probably around 100,000 megatonnes of accessible hydrogen - and that could represent **hundreds of years of supply**.

The techniques for harvesting it, says Mr Ellis, "should be similar to natural gas. The technology is already in place."

While the Bourakébougou site in Mali is currently the only facility producing white hydrogen commercially - and is only harvesting around five tonnes per year - there are moves to exploit reserves more widely.

Earlier this year, Bill Gates's Breakthrough Energy Ventures investment firm put \$91m (£72m) into US start-up Koloma, which is looking to exploit white hydrogen reserves in the US.

Meanwhile, prospecting firm Getech is hunting out potential deposits in Morocco, Mozambique, South Africa and Togo.

One major area of focus is South Australia, which in 2021 added hydrogen to the list of regulated substances permitted for exploration under the Petroleum and Geothermal Act 2000, clearing the path for exploration.

"Since February of 2021, six different companies have applied for and been granted 18 exploration licenses for gold hydrogen," says Suren Thurairajah, partner, climate and sustainability, at Deloitte Australia.

"The area under permit is 570,000 square kilometres, which is 32% of the size of the state of South Australia."

Most recently, a company called Gold Hydrogen announced the discovery of a large field of natural hydrogen in the state, which it hopes to bring into production next year or the year after.

So far, the major energy players are holding back.



"The big oil companies, I think, are very interested, but they're currently sitting on the sidelines, watching, taking a bit of a wait-and-see attitude. They're letting the start-ups take the risk - at this point this is a highly risky venture," says Mr Ellis.

"Once we see some production data from some of these wells, we will certainly see the major oil and gas companies moving into this space." One problem, he says, is that there's currently a lack of market for hydrogen in the US, reducing the incentive for exploration.

According to industry group the Hydrogen Council, Europe is the global leader in hydrogen project proposals, accounting for 35% of global investments, with Latin America and North America each representing about 15% of investments.

"So there's a sort of chicken and egg problem: markets aren't really developing until they see the supply, and the supply won't really be developed until they see the market," says Mr Ellis.

But, he adds: "I think it's a function of how much effort we put in. If we really decide this is something we need to figure out quickly, I think it could be done."

Thanks to Emma Woolacott, BBC Technology of Business Reporter. 12 December 2023

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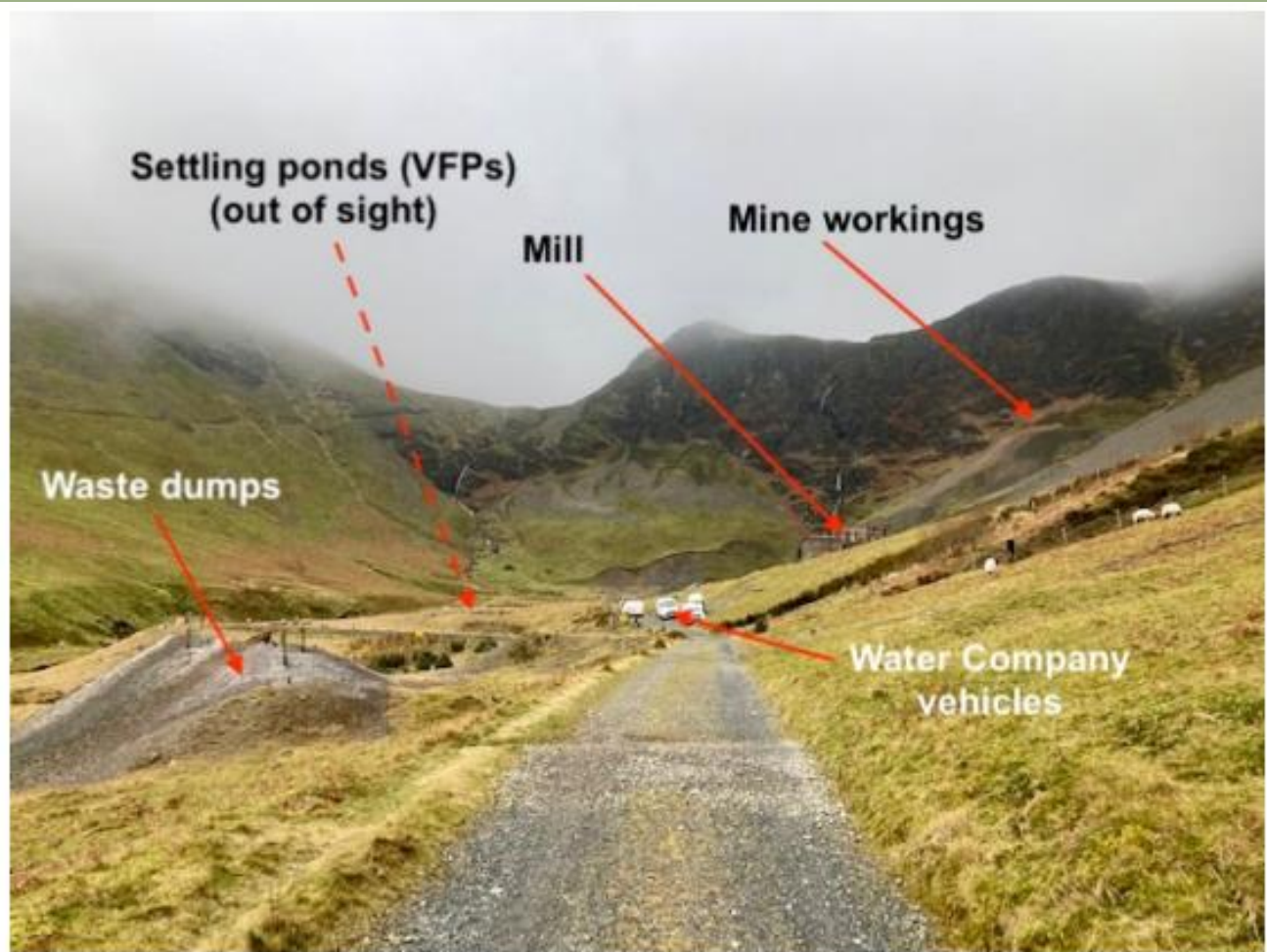
## Force Crag mine-water remediation

by David J. Grainger MIMMM

Force Crag Mine was the last working metal mine in the Lake District. It was abandoned in 1991. The site was mined for lead from 1839 until 1865, and for zinc and barytes from 1867 until it closed. It is a Scheduled Ancient Monument and a geological SSSI (site of special scientific interest).

The abandoned mine is situated on land owned by the National Trust within the Lake District National Park. The mine is not open to the public, but occasional guided tours of the mill buildings are organised by the National Trust.

This article is the result of an unplanned visit that I made to the mine area in February 2023 on a walk up the Coledale Valley from Braithwaite near Keswick. It is a follow-up to a conversation that I had with water company monitoring staff at the site. I have taken technical information from on-line reports by The Coal Authority and Newcastle University. The mine is a major source of metal pollution to local waterways. The Coal Authority worked in partnership with the Environment Agency to assess the level of environmental damage, and Newcastle University devised an innovative scheme to reduce the levels of metal pollution.



The mine is located at the head of the Coledale Valley 7 km west of Keswick. The existing mine buildings are at an altitude of 271 m with the workings some 300 m higher to the 1 northwest.

The narrow and steep-sided Coledale glacial valley trends northeast to open onto the neck of alluvial land separating Derwentwater and Bassenthwaite Lake. The Coledale Beck flows down the valley to join Newlands Beck and empty into Bassenthwaite Lake.

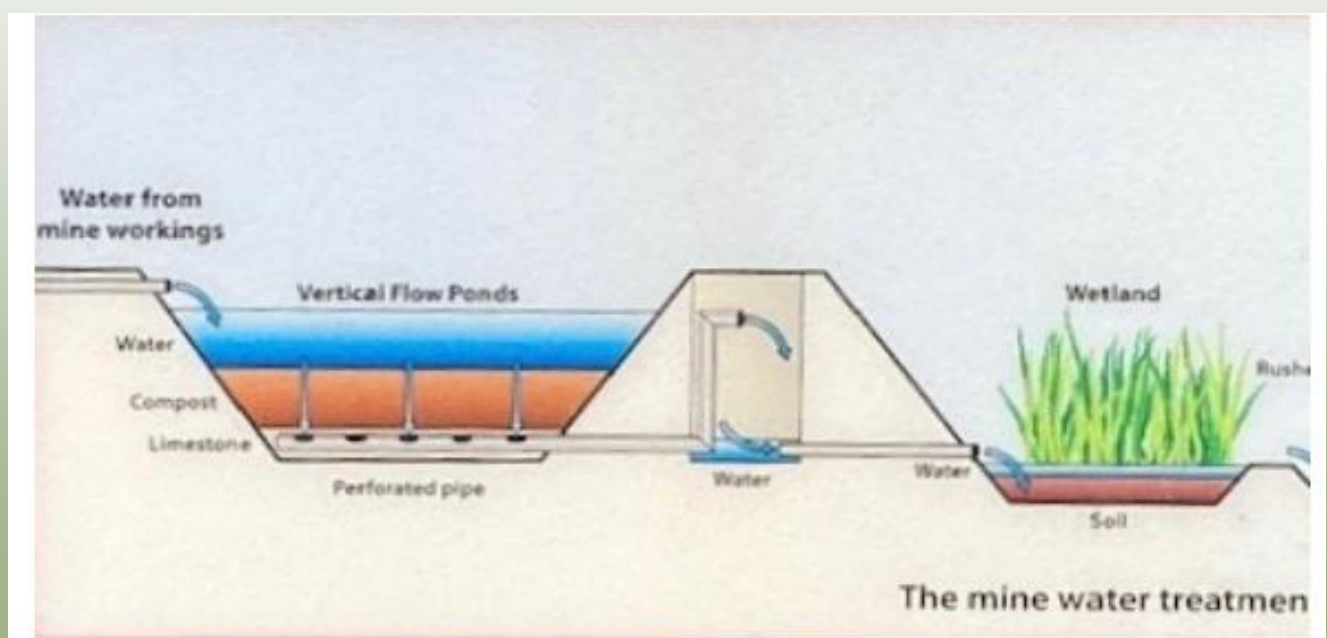
## The mine-water treatment scheme

Metal pollution (zinc, cadmium and lead) from Force Crag mine pollutes Coledale Beck. A study for the Environment Agency and the Department for Environment, Food and Rural Affairs (Defra), identified the environmental impact from the metal mine as being one of the worst in the UK. The Coal Authority worked in partnership with the Environment Agency to assess the level of environmental damage, following which researchers at Newcastle University devised an innovative scheme using the natural environment to clean the metal-rich water. The scheme was delivered by the Coal Authority in partnership with the Environment Agency, the National Trust, the Lake District National Park Authority, Newcastle University and others. The treatment scheme was opened on 20 November 2015 by the Water Minister Rory Stewart. Funded by Defra, it was part of a £8.5 million investment in low-cost solutions to tackle water pollution caused by abandoned metal mines that pollute over 1000 miles of rivers in England.





To treat the metal-rich mine water a full-scale passive mine-water remediation scheme was constructed based on the research by Newcastle University. It was the first of its kind in Europe and aimed to provide a better understanding of the passive method of removing metal contaminants from water. The outflow from the Level 1 adit was routed through a buried transfer pipe to two vertical flow ponds (VFP) for treatment. The ponds are lined with a geomembrane and filled with a compost treatment mix. They were built using the 2 existing bunding of the former mining tailings lagoon. The mine water in the VFPs seeps down through the compost in the ponds and passes into a wetland vegetated with soft rushes. The wetland filters any remaining solids in the water prior to discharging into the Coledale Beck and also aids in oxygenating the treated water.



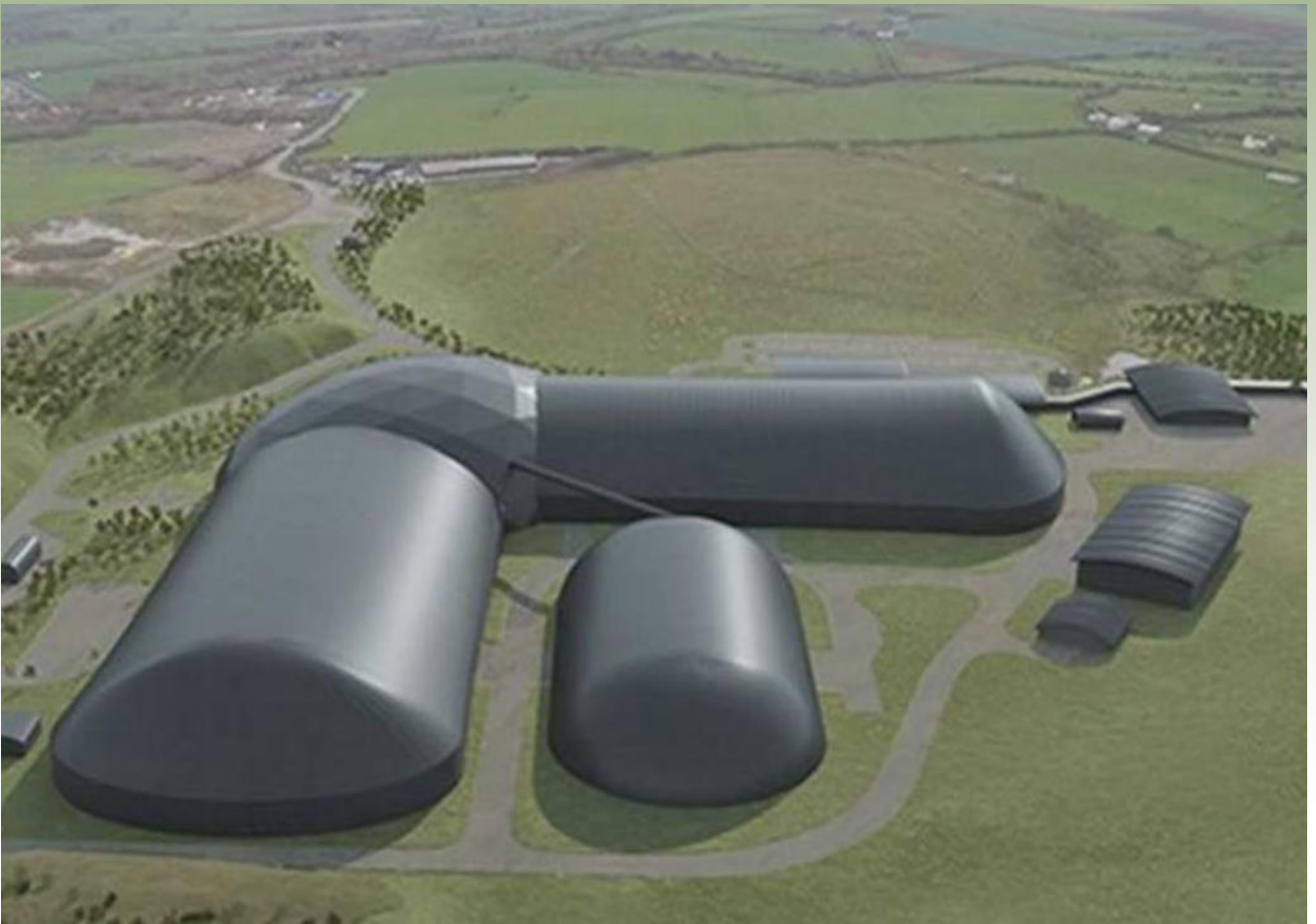


According to Dr Adam Jarvis, Reader in Environmental Engineering at Newcastle University, the University's design of the water treatment process followed more than 10 years of research and development, starting in the laboratory and culminating in the unique large-scale treatment system. Dr Jarvis said that it was a great example of undertaking research to resolve a real-world problem - pollution from abandoned mines. A 12-month intensive monitoring programme was established to fully understand the outcomes of the scheme.

The performance of the treatment scheme was excellent and it removed 98% of the zinc, 94% of the cadmium, and 94% of the lead from the mine water. As a result, up to a tonne of toxic metals is prevented from entering Bassenthwaite Lake annually. The programme was then extended for an additional three years to further understand and optimise the treatment system, working with Newcastle University. Monitoring continues through the regional water company. As of February 2023, two other projects for the remediation of metal-rich mine water were being built in the UK: in the North Pennines the Nent Haggs project will improve 60 km of the River Nent and the River South Tyne; and the Coombe scheme in Cornwall.

As a footnote, it will be well known to NEIMME members that remediation of contaminated mine water from abandoned coal mines has long used passive settling ponds and reed beds. However, the Force Crag scheme was the first time that such a passive method had been applied to the remediation of metal-rich mine water.]

## Cumbria coal mine legal challenge hearing postponed



**August 10, 2023** (Historic News)

West Cumbria Mining has recently received formal notification from the High Court of Justice in London advising that the rolled-up hearing relating to the challenges against the Government's decision to approve WCM's planning permission, set for 24<sup>th</sup>-26<sup>th</sup> October 2023, has been postponed. The hearing will now be re-scheduled to be heard after judgement has been handed down by the Supreme Court on another case (Finch).

At this stage it is unclear how long it will take for the Supreme Court to issue their judgement; however we do not expect the delay to be very significant. WCM will provide further updates as we receive them from the High Court.

In the meantime, WCM continues to progress the pre-start work required, including design, planning, equipment procurement and associated desk-based work.

**COURTESY OF NIA KAJASTIE 04 SEPTEMBER, 2023**

We patiently await an update on the Supreme Court Judgement, but surely some urgency must be instituted on this critically important project.

A brief explanation of the Finch project follows:-

## Issue

Under Directive 2011/92 EU of the European Parliament and of the Council and the Town and Country Planning (Environmental Impact Assessment) Regulations 2017, was it unlawful for the Council not to require the environmental impact assessment for a project of crude oil extraction for commercial purposes to include an assessment of the impacts of downstream greenhouse gas emissions resulting from the eventual use of the refined products of the extracted oil?

## Facts

In December 2018, the second respondent, Horse Hill Developments Ltd, sought planning permission from the first respondent, Surrey County Council ("the Council"), to retain and expand an existing onshore oil well site (comprising two wells) and to drill for four new wells, enabling the production of hydrocarbons from six wells over a period of 25 years.

The environmental impact assessment for the project considered the environmental impacts of "the direct releases of greenhouse gases from with the well site boundary resulting from the site's construction, production, decommissioning and subsequent restoration over the lifetime of the proposed development." However, it did not assess the environmental impacts of the downstream greenhouse gas emissions that would inevitably result when the oil extracted from the development site was later refined and then used, for example, as fuel. The Council granted planning permission for the development on 27 September 2019. The appellant applied for judicial review of the Council's decision, acting on behalf of the Weald Action Group. Her claim was unsuccessful before the High Court and the Court of Appeal. The appellant now appeals to the Supreme Court.



## Obituary to Tony Pender-By his Son, Richard Pender

*As you are all aware from our prior mail, Tony Died on 1st November 2023, and NEIMME received this detailed obituary from his Son, Richard, which we all endorse, and I hope he will not be upset by its inclusion in our Newsletter, so all Members can appreciate this exceptional man.*

### The Man

Strangely enough I have for many years wondered how I would sum my father up on the occasion of his passing. Now the moment has arrived I find myself forgiving myself for not having the words - he was an impossible combination of things for my ability with words to come close to capturing. He was part hard, no nonsense, rugger-b\*gger type, entwined with a surprisingly sensitive, considerate, deep-thinking soul.

Dad considered himself very fortunate to have lived in the time that he did, and to have had the experiences he had, regularly contrasting his own good fortune with that of his parents' generation. Born in Blackpool but raised in Cardiff he spoke fondly of his early education at Cardiff High School, and of a Headmaster who spotted his potential and guided his development. He was held back a year to be 'Head Boy' and prepare for Cambridge, an experience I believe broadened his horizons once he got there. It sounds like his Estate Management degree came very much second to throwing himself not only into his rugby but rowing too, and it was at Cambridge that I understand his lifelong interest in classical music began.

A talented rugby player he gained his Blue, lining up in 1963 for Cambridge against the All Blacks no less. (No mention please of the penalty he gave away that was apparently rather central to their losing!). He went on to play for some great sides for both Cardiff and London Welsh playing alongside hallowed names such as Gareth Edwards, Barry John, and JPR Williams. The Cardiff 1967 tour to South Africa featured heavily in his stories of this time and was clearly quite the adventure. In any other era I suspect he'd have played for Wales but this was their golden years. We know he played for the Wales "Possibles" side versus the "Probables" and there is rumour he was a travelling reserve, but of course they didn't have anything quite as soft as replacements in those days so he never got a cap. Typically of him he also got a great deal of pleasure from 'giving back', later helping to coach the Cardiff Youth team.

After periods at the Valuations Office in London, and the Welsh Development Agency in Cardiff, he took up the role of Chief Executive of English Estates, a government funded agency tasked with delivering economic regeneration through commercial property development and related activities, headquartered in Gateshead. Holding the position from 1979 to 1994 he was very proud of the work that English Estates did; in its time it was the largest owner of industrial space in the UK and through the 1980s extended its role to include the regeneration of towns and cities, the development of science parks and the management of strategic projects such as the redevelopment of the Royal Naval Dockyards at Chatham.

His contribution was recognised with a CBE for services to regional development, although he was always the first to stress that the work the honour recognised was the product of many dedicated and talented individuals, not just himself. In the North East he also found home.

When a restructuring of the governments' regeneration organisations brought an end to English Estates and his role there, early retirement proved to be no such thing. Dad took on roles across a range of organisations and initiatives, many stemming from the role English Estates had taken in sponsoring arts and culture. These organisations and initiatives are too many to list exhaustively but include the Northern Sinfonia, the Royal Shakespeare Company, the North Music Trust, Northern Arts, the National Lottery, Voluntary Arts, Carnegie UK, ERS, IOD-SA, Swallows Partnership South Africa, Dartington Hall and Schumacher College, Falkland Trust, Scotland The Bread, Newcastle Lit and Phil, the Mining Institute and Common Room, and the Ray Wind Farm CIO.

The recurring theme with my father is a sense of civic mindedness. He was not a particularly political man, nor was he religious, but he did firmly believe in society, and in playing a positive role to make it better. He was a presence in every room but he certainly didn't need matters to be about him. In hospital he voiced frustration with the fact his health was preventing him from making himself 'useful'. When told to rest and relax because the credit on his account was in surplus his response was "that doesn't matter, it's the next thing that counts". I don't think he considered himself a brilliant man, but he did get immense satisfaction from creating the conditions for others to be brilliant (indeed perhaps that's where his own brilliance lay), and whilst not a musician, actor, singer, or creative himself, he did believe in the value of a rich cultural life. Even more so if a glass of wine or two was involved... He became increasingly concerned in his latter years by climate change and lamented our unsustainable patterns of behaviour, seemingly always having appreciated himself that the most valuable things in life don't stem from excess consumption.

## Upcoming Lectures

**Thursday the 14<sup>th</sup> of December 2023**

[Fire Engineering: An Introduction to the Profession and Practice](#)

Dr Peter Wilkinson, Institution of Fire Engineers

via YouTube Live from 18:00-18:50, Q&A until 19:00.

**Thursday the 18<sup>th</sup> of January 2024**

The launch event for the '[Willington Railway](#)'

Les Turnbull,

via YouTube Live from 18:00-18:50, Q&A until 19:00.

Please book your tickets via the Eventbrite website for these Lectures, as we need to know attendances before the event,

Thank You!

**May We at The North of England Institute of Mining and Mechanical Engineers wish all our Members and Supporters a Very Happy Christmas, and we look forward to seeing you all at the 2024 Lecture series in Person.**



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Mailing address :NEIMME, Neville Hall, Westgate Road, Newcastle upon Tyne.NE1 1SE

E-Mail address: [office@mininginstitute.org.uk](mailto:office@mininginstitute.org.uk)

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