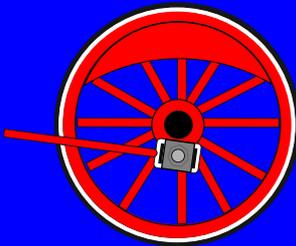


WATTRAIN

The World Association of Tourist Trams & Trains



NEWSLETTER No.9
June/July 2016

Edited by David Madden
davidpmadden@btinternet.com

FLYING SCOTSMAN RETURNS

In the UK it was great to see the iconic locomotive "Flying Scotsman" back in steam on the main lines following an extensive overhaul. The first of some major charter trains went from London (Kings Cross) to York providing superb footage on most TV channels. Thousands of visitors lined the whole route, although this had a rather unfortunate side effect too in that some spectators took terrible risks trespassing on the lines. For safety reasons the train had to stop on three occasions where accidents on what is a high speed line could otherwise have spoiled this great day. Of particular interest was to see this coal-fired locomotive producing nothing but white steam and smoke throughout its journey. "Flying Scotsman," owned by the National Railway Museum, will also be hauling a number of charter trains throughout the country.



The President writes:

WATTRAIN

LOOKING TO THE FUTURE (and the past!)



I first met Quique Diaz of El Tren del Fin del Mundo in Cuba in 1999, when I was invited to speak at a conference entitled ECOVAPOR. "You should set up a global organisation for operators of steam and tourist trains", he said. "In your dreams", I replied, wondering what purpose this would serve.

However, Quique was persistent and invited me to Argentina to visit his railway, which I and my family

accepted. I realised how much we could learn from one another and he and I combined with Chris LeMarshall to convene some international conferences and to set up what is now WATTRAIN. In the early days, we thought that our role would be largely advising and possibly extend to exchange of information. Quique also came up with the idea of setting up an internet equivalent of the ancient Alexandria Library, the fount of all knowledge. This latter proposal was, however, never developed, partly due to the lack of time to carry out the research and set up the website to accommodate such information and partly because the idea became obsolete as internet search engines developed. Also Quique had to stand down as Vice-President due to ill-health.

We have always agreed that the development of WATTRAIN should be market led and over the last few years it became more apparent what our members require. So I thought it might be helpful if I set out my own vision how we should go forward, prompted by our excellent CEO, David Madden.



During the last four years, my colleagues and I (including our Patrons) have been called on to advise Governments and to intervene with State authorities to explain why tourist and museum railways may need assistance and to lobby, where necessary, explaining how our operations can help to promote tourism, and thereby to generate additional income to the region which they serve. This has been reinforced by independent surveys carried out in recent years.

Furthermore, WATTRAIN is now building up a panel of consultants which our members can call on to give technical and other expertise. Another area which I am anxious to develop is the provision of training in traditional skills, so that these are not lost to future generations.

Lastly there are a few issues which have taken on a global hue, such as the curtailment in the use of coal. We are fighting for the right of our members to continue burning the traditional fuel of coal in our steam locomotives but we are also exploring ways in which we may reduce further our already minute carbon footprint.

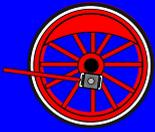
David Morgan MBE
President

The Future of Coal. David Madden

Coal remains an important issue for all heritage and tourist trains throughout the world as well as other historic transport. One country, Ireland, has already announced that the burning of coal will be banned throughout the country by 2018! In the UK and other countries the use of coal, particularly for power generation, will be reduced considerably in favour of 'less safe' fuels for power stations.

The affect of this is that the national rail system is reporting a considerable downturn in coal movements within the UK.

Continued overleaf



The Future of Coal (Continued)

'Rail' magazine headlining that coal movements are down 54.6% in just one year. This is likely to get worse as more power stations are closed in favour of those using biomass and other 'safer' fuels.

However coal is still being produced in the UK with other imports continuing from the rest of the world. Information from coal producers suggest this will continue for some years to come.

There is however some other potential good news. The Irish Government is to hold a public meeting later in the year to discuss its plans. One important area of the government's announcement is that they will listen to exemption requests; the operators of steam charter trains in Ireland plus representatives of Wattrain will be making a case for such exemptions. WATTRAIN strongly believes that negotiations should demonstrate our willingness to cut coal use, utilising other fuels and methods in the lighting-up process and thus avoiding more polluting coal. There are systems available too that use electrical or diesel power for warming up locomotives.

Although not directly related to coal, the United States has stated that diesel locomotives on the national system will all need to be re-engined with the aim of considerably cutting down on dirty emissions. It is stated however that this will not apply to preserved diesel locomotives.

In examining ways and means of saving coal use with steam locomotives, and where the best coal comes from - *Anders Johansson and Clive Moore comment:*

My company delivers flue gas cleaning equipment, especially Electrostatic Precipitators and desulphurisation equipment. I asked one of our experts about coal qualities, and on the question where you can find coal with low sulphur and ash content, the answer was a clear "Indonesia". That coal also has a high energy coefficient; most other coals have either/or. Maybe we should check the qualities and if it's possible to buy large sized coal from there? (Normally export coal is sold as coal-powder in different sizes.)

Anders Johansson.

Just to clarify Indonesia and the coal market, Indonesia is definitely the largest coal exporter in the world, Australia is the second largest exporter. Australian coal, as internationally measured across both emission levels (ash, sulphur, heavy metals) and energy content (thermal efficiency), is recognised as superior to any Indonesian coal. The Australian coal producers are looking for opportunities to sell coal as I am certain Indonesia does, and here may be an opportunity to consider how best to leverage off existing high quality international coal suppliers. Our coal requirement may be small per rail organisation however the aggregate of all coal consumed by tourist rail would not be insignificant, the need for high quality coal can be important to demonstrate that tourist rail is considering the environment and that where possible we use coal that is of a high quality. The coal marketing organisations in Australia can be contacted to find potential international suppliers.

Clive Moore.

WATTRAIN Directors write:

From: Ian Leigh, United Kingdom



If you have been wondering where is the WATTRAIN website, unfortunately it became unmaintainable and the decision was taken to simply take the site down and start again. So I have been working on a new and more interactive site, which will be easier to maintain and the designers are currently translating the ideas into a working website. We expect the new website to be up and working towards the end of June or in early July. In

the meantime if you want to pay your membership subscriptions or join please contact me on:

wattraintres@btinternet.com For instructions on how to do so by PayPal.

Andrea Hett has decided to step down as company secretary so I have volunteered to take on the part of the role that looks after what we have to do under the Companies Act 2006 and Memorandum and Articles of Association.

Gabi will continue in the part of the role that supports our Board meetings. One of the first jobs for me will be to send out the paper work for the Annual General Meeting which we are planning to hold at the APHTRO conference in New Delhi, India sometime between the 19th and 21st October. In support of that I have sent the papers to the accountants for the financial year ending 30th April. However we would like to recruit a successor for Andrea - see below:

Currently we are looking for people who can design and produce the newsletter

- Are you a photographer who can supply pictures of heritage trains and trams from around the world or in your home area?

- Are you a copywriter who can create interesting articles for a newsletter of what is happening round the world?

Do you have the skills to design and edit the newsletter so it is ready for publication?

- Do you want to volunteer with us?

- Do you have the skills to design and edit the newsletter so it is ready for publication?

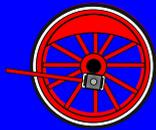
- Do you want to volunteer with us?

If you have one or more of these skills (or want to learn them) then please contact us on wattraintres@btinternet.com with your résumé / CV

>We are also looking for a sponsorship / fund raising manager

So if you have experience in selling sponsorship or other (legal) ways of raising funds then please also contact us on wattraintres@btinternet.com with your résumé / CV. We need a webmaster to improve and update the WATTRAIN website, again contact us on wattraintres@btinternet.com with your résumé / CV

We need a membership secretary, someone who not only can keep the excel spreadsheet of members up to date and persuade the current members to renew but someone who can sell membership to all those organisations who never knew they needed to be a member of WATTRAIN. If this sounds like a challenge you want to take on then please also contact us on wattraintres@btinternet.com with your résumé / CV.



WATTRAIN DIRECTORS COMMENTS

Stephano Benazzo, Italy
Vice President of Wattrain



I am honoured to be part of the distinguished group of experienced people serving Wattrain and its members. I bring to my activity in the Board of Wattrain my enthusiasm, my knowledge of international affairs from my previous profession as Ambassador of Italy, and my love for the world of trains. I am convinced that Heritage and Tourist Trains must be protected and enhanced. Wattrain gathers information and disseminates it among our members, enhances the value of our activity with authorities, and does its best to encourage those who are approaching new venues in trains. Trains should be kept alive and functioning. We have the duty to remember the engineers, the crews and the maintenance people who devoted their lives to trains. Expressing some basic characteristics of humankind: ingenuity, courage, economic initiative and spirit of adventure, trains are an essential feature of the economic, social and industrial history of the world. We must keep them active for future generations.

From: **GABRIELA GALIZIA (Argentina)**



WATTRAIN is the forum for voices throughout the world for the best growth and benefits in railway heritage. I feel highly honoured and fully committed to do my best as a representative of the South American countries."

Gabriela Galizia

From **BOB LAPRELLE, United States**



I am proud and honoured to be associated with the many fine people at WATTRAIN. As the representative from North America, I look forward to sharing ideas and information as well as advocacy for heritage rail worldwide. I place a high priority on furthering our knowledge and passion with a new generation of railway preservationists to ensure that our field will flourish in the future.

From **Chris Le Marshall, Australia**



"The tourist and heritage rail scene in Australia is "patchy". The difficult economic environment in Australia is challenging many organisations. Those experiencing growth in numbers are largely benefiting from a significant influx of Chinese visitors. The Puffing Billy Railway in Victoria is experiencing significant growth as a result of international patronage. In contrast, the South Gippsland Railway has recently closed. It is believed that the closure was a result of infrastructure, rail accreditation and governance issues. Across the country, endeavours with strong governance, a clearly defined strategy and good asset maintenance are sustaining their business and, in some cases experiencing positive growth."

WATTRAIN-Kyoto Railway Museum.
(feature on Kyoto in "Metro", 13.6.16).

All Aboard.

Train travel rules supreme in Japan and this great love affair with rail has been paid homage to at the new Kyoto Railway Museum (www.kyotorailwaymuseum.jp).

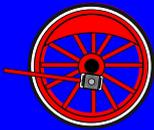
Having opened its doors less than two months ago, the state-of-the-art space focuses on how technological advances have shaped ground transportation in Japan, from old locomotives in the 1860's to the train that steamed into the Guinness Book of Records as the first in the world to reach speeds of 300 kmh. Visitors can also join a train conductor training session and even experience the sensations of being behind the controls of a Shinkansen bullet train.

Jill Wheatley

Tourist Railways in Argentina? Jacqueline Grosch

The Government of Argentina is thinking of setting up several tourist trains in the country or in transforming parts of some mining lines into tourist railways. One of them is the branch line from Rio Turbio to Punta Loyola in the Province of Santa Cruz. The line, which is approximately 300km long, transports coal. There are currently around 15 Mitsubishi steam locomotives which have fallen into disuse. The idea is to refurbish four or five of them, obviously those in the best state of repair.

(Quique Diaz - Former Vice president of Wattrain and Owner/operator of "The End of the World Railway", Ushuaia, Argentina)



CASE STUDY Introduced by Clive Moore

Recommending carbon offset opportunities proved the greatest challenge of all. While general guidelines to calculate carbon offsets do exist, methods vary case by case. Carbon sequestration, for example, may be calculated tree by tree or by woodland area, which is in turn impacted by complex interactions and variables including climate, rainfall and soil composition. Given the limited time and absence of qualified expertise, only an estimate of sequestration rates was possible. A more reliable calculation method remains to be established in future. As Paul concluded, rather than Puffing Billy striving to achieve carbon neutrality, "at this stage a more effective strategy would be to actively reduce the existing carbon footprint as much as possible before looking at offsetting". The student's work organising Puffing Billy's environmental data and reporting system identified a number of actions that could be taken straight away and in future to reduce the railway's environmental impact. These ranged from simple measures such as turning off appliances and lights when not in use, to promoting recycling messages to foreign customers in their native languages. Information gathered while talking to Puffing Billy's drivers revealed the impact on engine efficiency of different driving techniques and ways of shovelling coal and prompted the student to suggest driver training to encourage efficient engine driving habits.

GREEN STEPS STEAM AHEAD TO REDUCE "PUFFING BILLY" 's ENVIRONMENTAL FOOTPRINT.

Monash Sustainability Institute's award-winning Green Steps programme and funding from Sustainability Victoria helped student Paul Greco discover new ways for Melbourne's steam engine 'Puffing Billy' to reduce its environmental footprint.



SNAPSHOT

Organisation

Emerald Tourist Railway Board, better known as Puffing Billy Railway is a heritage steam railway in Belgrave, Victoria, running coal-fired steam engines over 24km of track meandering through the Dandenong Ranges.

Project

Sustainability Victoria provided \$3500 funding for a Monash University Green Steps student to spend 15 days interning at Puffing Billy Railway helping with their environment programme.

Objectives

Establish a process to monitor Puffing Billy's environmental footprint and how to reduce its impact in future, including setting green-house gas (GHG) reduction targets and simple ways to reduce waste and water consumption.

Challenges

Puffing Billy's biggest environmental impact – and its popular appeal – comes from the coal-burning steam engines that pull the railway's carriages. Together, they consume approximately 1200-1500 tonnes of coal annually using a form of technology which is by its very nature unpredictable. Without access to expensive equipment to calculate the exact level of GHG emissions from coal burning, the student had to consider alternative ways to gather the information he needed, including quizzing the engine drivers.

Outcomes

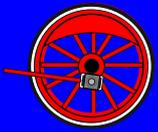
The student's work organising Puffing Billy's environmental data and reporting system identified a number of actions that could be taken straight away and in future to reduce the railway's environmental impact. These ranged from simple measures such as turning off appliances and lights when not in use, to promoting recycling messages to foreign customers in their native languages. Information gathered while talking to Puffing Billy's drivers revealed the impact on engine efficiency of different driving techniques and ways of shovelling coal and prompted the student to suggest driver training to encourage efficient engine driving habits.

Next Steps

Apply the results of the environmental audit to reduce GHG emissions and consider ways to promote the railway's environmental report card to its potential customers.

Green Steps Placements

Green Steps is an award-winning extra-curricular training and internship program for tertiary students developed by the Monash Sustainability Institute. Since starting in 2000, Green Steps has successfully trained over 500 university students. As well as helping organisations with their emissions reduction and general environmental management, each year the programme quips young leaders with the skills, support and confidence to facilitate environmental change and improvement.



ABOUT PUFFING BILLY RAILWAY

Puffing Billy Railway is a key tourist attraction in Belgrave, Victoria, which attracts over 250,000 passengers annually from all over the world. The railway is government funded and employs just over 50 full- and part-time staff working alongside an army of volunteers across 12 stations (six main/staff & six wayside stations)

Sustainability challenges

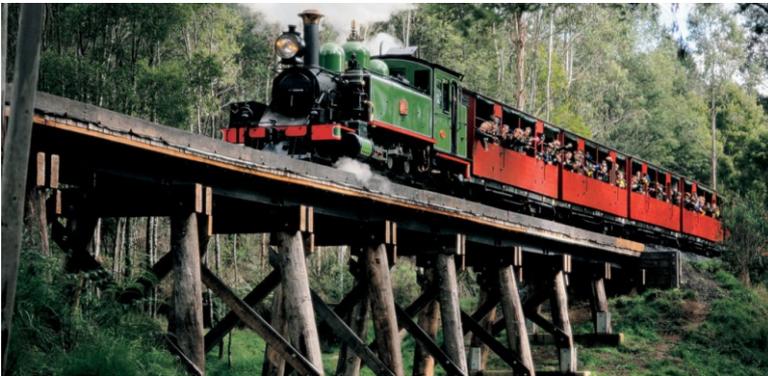
At the project's inception, Puffing Billy Railway had not yet established a process to collect environmental data or measure its environmental footprint.

Current Sustainability practices

Puffing Billy Railway joined Sustainability Victoria's Resource Smart Government programme in 2008, receiving advice and assistance on how to reduce their environmental impact. As a government-funded organisation with an eye on minimising expenses, Puffing Billy Railway actively promotes a culture of energy conservation and encourages staff and volunteers to minimise water, waste, electricity and gas consumption wherever possible

Sustainability goals

As well as saving costs, Puffing Billy hopes to reduce reliance on CO²-emitting coal and showcase its emission reduction achievements in future marketing initiatives. They will also explore opportunities to offset their remaining carbon emissions. The data collected will also allow for public reporting and benchmarking against other organisations.



THE PROJECT

To establish Puffing Billy Railway's current environmental footprint, engineering student intern Paul Greco collected energy consumption data across the key areas of electricity, gas, water, vehicle fuel, paper waste and coal. Total consumption for each was calculated based on National Greenhouse Accounts (NGA) factors to arrive at a baseline reference and this was then used to estimate GHG emissions.

With an environmental snapshot in place, Paul next set about coming up with simple ways that energy savings could be put into effect both immediately and into the future.

Challenges & issues.

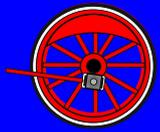
Paul's first challenge was to gather and collate multiple account records of energy usage located across the length of Puffing Billy's 24km track. Each station and office was mapped to illustrate where the various sites connected to each utility and all data was then collated month by month into a spreadsheet designed to allow easy comparison of future results.

Calculating the GHG emissions from Puffing Billy's coal-burning engines proved a far from simple task, determined not by the volume of coal purchased, but on the combustion efficiency of each engine.

As Paul was to discover; "the information I was looking for pretty much doesn't exist." In the absence of sophisticated engine testing, the time-honoured research techniques of observation and asking questions revealed its own wealth of anecdotal information. A key outcome of talking with engineers and engine drivers was Paul's finding that "different drivers drive and fire the engines differently, affecting the amount of water and coal consumed".

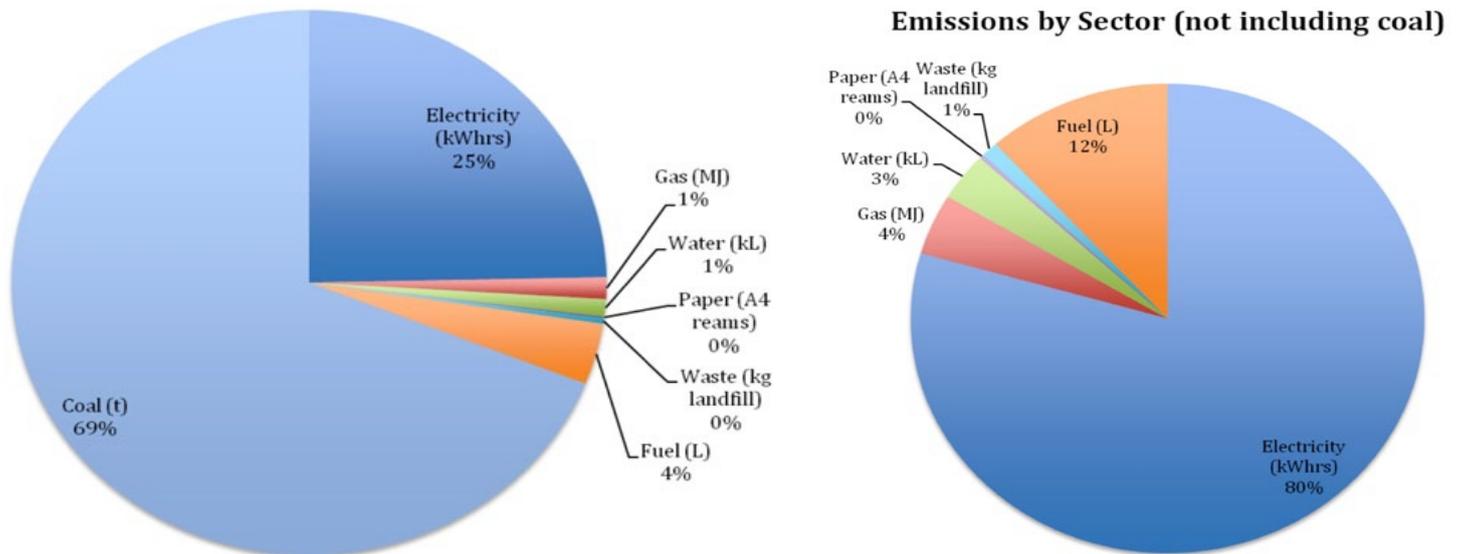
Recommending carbon offset opportunities proved the greatest challenge of all. While general guidelines to calculate carbon offsets do exist, methods vary case by case. Carbon sequestration, for example, may be calculated tree by tree or by woodland area, which is in turn impacted by complex interactions and variables including climate, rainfall and soil composition. Given the limited time and absence of qualified expertise, only an estimate of sequestration rates was possible. A more reliable calculation method remains to be established in future. As Paul concluded, rather than Puffing Billy striving to achieve carbon neutrality, "at this stage a more effective strategy would be to actively reduce the existing carbon footprint as much as possible before looking at offsetting".

A more reliable calculation method remains to be established in future. As Paul concluded, rather than Puffing Billy striving to achieve carbon neutrality, "at this stage a more effective strategy would be to actively reduce the existing carbon footprint as much as possible before looking at offsetting".



Results

The following diagrams illustrate Puffing Billy Railway's total GHG emissions by sector



If you cannot read the figures above these are repeated here.

Electricity (kW hrs) 25% - Coal (t) 69%

Gas (Mj) 1%, Water (Kl) 1%, Paper (A4 reams) Waste (Landfill) 0%, Fuel (L) 4%

Paper (A4 reams), Water (kl) 3%, Gas (Mj) 4%, Fuel (L) 12%, Electricity (kW hrs) 80%

Next steps

Paul's investigations revealed a number of actions Puffing Billy could put in place to reduce their environmental impact and GHG emissions now and in future, for example:

- Electricity: Turning off appliances and lights after hours and when not in use will have an immediate impact.
- Gas: Installing insulation or adjusting heaters to run at less than full power.
- Water: Establishing the most effective method of driving and firing an engine and training all drivers to follow this practice has potential to conserve the amount of water consumed and to improve engine efficiency.
- Paper: Encouraging double-sided printing, scanning, emailing, and printing only what is needed and then only in black



- Waste: Promoting a stronger recycling message, perhaps in a variety of languages, as well as adding a recycling bin for paper to the existing recycling bins for glass and plastics.
- Fuel: Using log books to find out why Puffing Billy's vehicles drive the equivalent of the earth's circumference – 40,000km – almost six times a year, and applying the results to conserve vehicle use.
- Coal: Given that coal burned to fire Puffing Billy's steam engines is by far the largest contributor to carbon emissions, training drivers and firemen to operate engines as efficiently as possible would help to reduce coal usage.

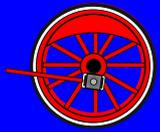
Published by Sustainability Victoria. © Copyright Sustainability Victoria, March 2012

WATTRAIN WEBSITE

As stated by Ian Leigh, the Wattrain website is under overhaul.

Although not fully operational, the new version can be viewed at:

<https://www.wattrain.net>



Wattrain, the World Association of Tourist Trams & Trains
2015 World Congress: "Sustainability, inspiring the new generation"
(Japan, October 24th to 26th, 2015)
Open Symposium for the public on the heritage railways on the world
(Monday, October 26th, 2015)
Remarks of Stefano Benazzo, Wattrain Vice President
Dear President Suga, dear President Morgan, dear Friends.



There is no doubt that it is fun to ride on a heritage train, to drive a steam train, to light a loco, to manage a line. However, I wish to submit that we are not doing it only because it is fun: we do it also because we feel that we need to respect the memory of all those who designed trains, built them, drove them, repaired them, and managed them.

On the same line of thought, we cherish and respect historical "Objects" like ancient planes, vintage cars, and old ships. In particular, many countries lovingly keep historical Ships: UK, for example, (with Cutty Sark, Great Eastern and many others); Japan, with the sail training ship moored in Yokohama; and many other

countries around the world.

There is indeed a clear duty of memoir to fulfill towards all those who worked on and for ancient transportation means, or in factories of the past: that is in fact what Industrial Archeology is about.

We have therefore a responsibility towards protecting heritage trains. It is not enough to study them, to organize congresses, seminars, to show trains in museums, nor to enjoy sitting in them, smell them, travel on them. We must do our best to ensure that future generations will have the possibility to do the same.

However, there is a problem for heritage train lovers and keepers of their memory.

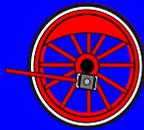
You know that environmentalist movements are trying, and rightly so, to do everything possible to reduce pollution. That includes the use of coal in industry and transportation. There is in fact the possibility that some bureaucrats will offer in a not too distant future an alleged solution, simply by prohibiting the use of coal. That would clearly hit the steam trains, and make it impossible for them to run.

You also know of course two simple facts. First: the fraction of pollution coming from heritage trains is less than minimal compared to the pollution coming from industry at large: it is irrelevant. Second: Some countries (China, India, for example) depend heavily on coal for their industry and their transports. It is therefore ridiculous to kill steam trains, i.e. heritage trains, just because steam train operators lack the financial, diplomatic and media capacity of some countries and corporations.

That is why I wish, on behalf of Wattrain, to make a strong appeal to all of you to co-operate with us to create a strong transnational movement, all over the world, to study the matter and prepare the basis for a pre-emptive strike meant to avoid coercive measures against the use of steam on heritage trains.

We must not react but preempt. Wattrain feels that we should act now, not when the decisions will be taken. That is why we are having a meeting later on today to set the guidelines for our action. I hope you will all support Wattrain's initiative.

Our members and we are committed to campaigning to ensure that we will continue to enjoy the right to use coal as the traditional fuel in our locomotives on the basis that the impact if their emissions on the world's carbon footprint is minimal. Despite this, we will continue to explore actively ways to reduce further those infinitesimal emissions.



Phil Girdlestone, steam pioneer – obituary

Philip Girdlestone, who has died of cancer aged 61, was a passionately committed engineer who made it his life's work to design a new generation of steam locomotives that were far more efficient, reliable and environmentally friendly than their conventional forbears.

Girdlestone and his fellow engineers David Wardale, Shaun McMahon and Roger Waller were disciples of the visionary Argentinian Livio Dante Porta, who was convinced that modern steam could match or exceed diesel in efficiency. Each worked with Porta on projects worldwide, and his death in 2003 left them to carry on his legacy.

Unfortunately for these innovators, the world's major railways saw even modern steam as a distraction from diesel or electric traction. Main-line steam haulage has ended almost everywhere, and most engines still working cater for tourist traffic. In the words of a colleague, Girdlestone was "ahead of his time, 20 years too late".

Philip Girdlestone was born at Perivale, Middlesex, on September 1 1954, to Len Girdlestone, a building company site manager, and his wife Mamie. He grew up in Wokingham; from Forest grammar school, Winnersh, he read Engineering at Birmingham University.

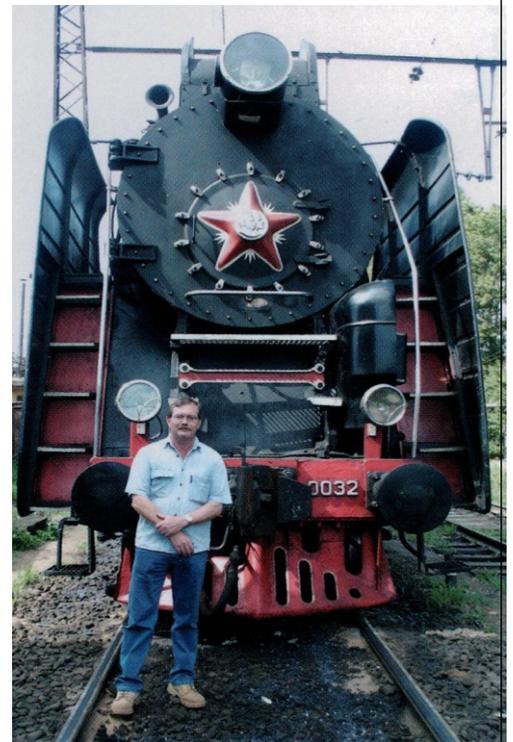
As a boy Phil was inspired by the romance of steam and just months after BR ran its final steam train, he turned, at 15, to the 1ft 11½ in gauge Ffestiniog Railway in north Wales to start his career. Joining the Ffestiniog in 1970 as a volunteer fireman, he qualified as a driver and in 1979 joined the permanent staff at the FR's Boston Lodge Works.

He was soon appointed technical assistant. In 1982 he began corresponding with Porta and Wardale about modern steam development work in South Africa and Argentina. They had re-engineered a South African Railways heavy narrow-gauge loco, nicknamed the "Red Devil", to incorporate the latest in thermodynamics including special exhausts and a modified rotary oil burner; the rebuilt engine generated 43 per cent more power than its classmates, could exceed 75 mph with a 22-car passenger train, and saved 30 per cent in coal and water.

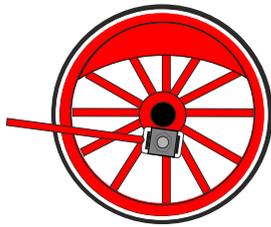
Girdlestone sought to bring similar technologies to Britain. As works superintendent at Boston Lodge from 1983, he converted the diminutive Victorian engine Linda back from oil-firing to coal. Linda proved her worth, hauling longer trains at less than 70 per cent of the cost, but after a drop in oil prices she was re-converted to oil.

Porta reckoned Girdlestone the best draughtsman he had come across, and put him on standby to move to the US as chief draughtsman on his ACE 3000 locomotive project. Instead, however, he went to Hugh Philips Engineering in South Wales, making South African-style improvements to Sudan Railways locomotives.

He designed new boilers for the Brecon Mountain Railways' engines, and consulted on the company's acquisition of BR's narrow-gauge Vale of Rheidol branch. In 1988 the 2 ft gauge Alfred County Railway in South Africa resumed steam haulage of freight and passengers over a 75-mile route using articulated Garratt locomotives, and appointed Girdlestone its chief mechanical officer.



Note: he full Obituary can be found at www.telegraph.co.uk :



WATTRAIN

THE WORLD ASSOCIATION OF TOURIST TRAMS & TRAINS

**Representing the interests of Heritage
& Tourist Trams & Trains all over the World**



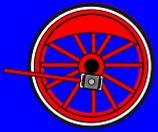
WATTRAIN is based in the UK but its directors and staff (all volunteers) come from all over the world. All have considerable experience of heritage & tourist railways. The organisation exists to collate information and problems and introduce solutions and ideas for the benefit of future operations.

WATTRAIN is leading the way in the effort to sustain sources of coal necessary for the continued operation of historic steam locomotives. We believe the responsible use and demonstration of coal will not only preserve a vanishing aspect of our industrial heritage, it will also promote new technologies for its cleaner use in the future.

Wattrain membership is open to all heritage and tourist railways, plus advisory bodies such as the Heritage Railway Association in the UK and Ireland and Fedecrail in Europe. Individuals, with an interest in our railways, are also welcome to join us. For full details of our organisation and membership visit our website.

www.wattrain.net

WATTRAIN organises international conferences with the next one planned for Dallas, Texas. Previous conferences were held in Switzerland, Argentina, the UK, Australia and Japan. Apart from the conference, they provide an opportunity to experience heritage & tourist railways in these and other countries.



The world's most famous locomotive, the '[Flying Scotsman](#)', made its inaugural run from London to the National Railway Museum in York after a £4.2m effort to restore the steam legend to its former glory.

Tens of thousands of people, from fascinated bystanders to train fans and 'puffer nutters', lined platforms, crowded tracks and hung over bridges as the venerable locomotive thundered up the East Coast Main Line, pulling 11 carriages crammed with dignitaries, press, paying ticket holders, rail engineers and former staff.

Just before it departed from King's Cross, [National Railway Museum](#) Director Paul Kirkman stated:

"It has taken years of hard work to get this far and it is incredibly satisfying to see the most famous locomotive in the world back on track, steaming up the East Coast Mainline. We would like to thank all the generous supporters of this complex project – this moment is a vivid testament to their achievement."



© David Madden July 2016

London & North Eastern Railway Class A3 No. 4472 "Flying Scotsman". Perhaps the most famous steam locomotive in the world, Owned by the National Railway Museum, York. In 2016 it emerged from a heavy overhaul and regularly hauls charter trains in the UK.

Finally, on a personal note I have mentioned the "Flying Scotsman", probably the most famous steam locomotive in the world, and you may be interested in the drawing of this locomotive on this page.

This is part of my own drawing business and you may be interested in a full size copy produced on 220 gsm satin paper using K3 Ultrachrome inks (Archival inks). The prints are 500mm x 210mm are also available fully mounted on hard board ready for framing. Prices are (print: £10 each or £15 (fully mounted)) (UK Prices).

Further details: e-mail: davidpmadden@btinternet.com