

# Who we are and what we do

The UK's National Nuclear Laboratory (NNL) offers a breadth of technical products and services supporting the complete nuclear fuel cycle, from fuel manufacture and power generation to reprocessing, waste treatment and disposal. We operate from six sites in Cumbria, Lancashire, Cheshire, Gloucestershire and Oxfordshire, although most of our work is focused around our sites in the North West of England, and we are the second biggest industrial employer in West Cumbria.

With over 10,000 man years of nuclear experience across the fuel cycle, coupled with world-leading nuclear R&D facilities, we deliver the experts and technologies that ensure the UK nuclear industry operates safely, efficiently and cost effectively.

NNL plays a central role in the co-ordination of UK nuclear research and development and maintains close links with academia and industry. We support Government in safeguarding the UK's nuclear skills and capabilities and provide advice on key strategic decisions.





#### Our scope of work includes:

- Waste Residues and processes
- Measurement and analysis
- Spent fuel technology
- Fuel and radioisotope technology
- Safety management
- Asset care
- Security
- Waste management technology
- Environmental services

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#### Our UK customers include:

- Nuclear Decommissioning Authority
- Sellafield Limited
- EDF Energy
- Ministry of Defence
- Springfields Fuels Ltd AWE

In other parts of the world we work with Governments and utilities as well as other National Laboratories.

# Introduction from the Managing Director

# Welcome to the first NNL Corporate Social Responsibility report

Since NNL was formed, we've taken our responsibilities as a member of the communities where we are based very seriously. We want to be a good neighbour and to play our part in making local communities - and the people within them - successful. There are obviously a lot of benefits for us in doing so - we build stronger relationships with customers and key stakeholders, we raise our profile and we develop our people. But for us, the main reason is simply that it's the right thing to do.

Over the past year we have introduced a more structured approach to how we go about engaging in our corporate social responsibility activities – whether that is making a donation to a worthy cause, providing young people to support activities in schools and colleges or sponsoring bigger events. In all cases we want to make sure that we are being fair and objective in deciding what we can support and that we are as using our resources as effectively as possible.

Although our outreach work has always been important to us, this is the first time we have produced a report to bring share what we do with a wider audience. I hope you enjoy reading about our work, and we would be keen to hear what you think. Please feel free either to contact us at: <a href="mailto:schools@nnl.co.uk">schools@nnl.co.uk</a> or by contacting one of the local co-ordinators who are listed on page 5.

Paul Howarth Managing Director, NNL

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# Criteria for support

Like many companies, we receive more requests for help and support than we're able to say "yes" to, so we often have to make some difficult decisions. We have developed a series of questions which we ask ourselves when we receive requests for help and we consider all the relevant questions from our list when coming to a decision.

#### **Mandatory Criteria**

We have some mandatory criteria which any application must meet, such as:

- We will not make any donation to any political party or politically-motivated fund
- Any activity funded or supported must comply with all relevant national and other laws
- We will not support any activity where we feel there is a substantial risk of the participants suffering injury or other harm through participation
- We will not support any activity or cause which we believe will bring the name of NNL into disrepute

#### **Further Questions**

But assuming a request passes these (and nearly everything does) then we move on to ask questions like:

- To what extent has the activity been initiated by NNL as a business or by NNL Staff?
- Is the activity involved being carried out by NNL staff and if so how many?
- Are the proposed audiences/beneficiaries within the communities where we have facilities or where our staff live?
- Does the activity have a STEM focus?
- Is the activity being led or supported by key NNL customers or stakeholders?
- Does the activity contribute towards supporting NNL recruitment?
- Have we established any precedent or stakeholder expectations by funding this activity in the past?
- Is the activity consistent with NNL's desire to maintain a balance across the CSR portfolio (eg across our various sites)?
- Are any beneficiary organisations involved properly registered as UK charities?
- What is the balance between cost of support and the positive PR opportunity it creates for NNL?
- Would the general public, stakeholders and employees see the activity as being appropriate to the activities of NNL?

### **NNL's CSR Coordinators**



I initially got involved by volunteering at a Smallpeice course in Lancaster, going from volunteer to course lead and now I co-ordinate all NNL's work with the Smallpeice Trust. Being based at Preston Lab I also wanted to increase the amount of STEM work that we do locally and have helped with NNLs involvement in local events such as Lancashire Science Festival and Engineering Your Future (EYF). Recently I have also helped NNL become one of the sponsors for Preston's College's new state of the art STEM centre.

Jo Fagan, NNL Preston, jo.m.fagan@nnl.co.uk



I became involved with CSR at NNL just over a year ago. As part of my graduate program I was involved in a project looking at benchmarking what NNL does compared to other companies. From this I became involved with a Smallpiece event in Surrey which was an enjoyable experience, I also plan to get involved with that again this year. I also became the co-ordinator for Culham and Stonehouse, working over the past few months to expand the work that we do in those areas.

Paul Styman, NNL Culham, paul.d.styman@nnl.co.uk



I coordinate events around the Workington Laboratory in Cumbria. I am passionate about inspiring young people to enjoy STEM subjects and to showcase the breadth of opportunities available in the industry. Some of the schemes that we have been involved with are the Engineering Education Scheme, where a group of students undertake an engineering project with NNL, Frank Morton Chemical Engineering Sports Day and Workington's Work Experience Scheme. All of these events provide fulfilling work experience and are also great fun!

Mithila Manage, NNL Workington, mithila.n.manage@nnl.co.uk



Since joining NNL I have been heavily involved in CSR. I am now the coordinator for CSR activities around the Warrington area including the Cheshire Science Festival and Engineering Your Future. I am also involved in the Engineering Education Scheme in which NNL teams up with a school or college allowing students to work through a real life engineering problem, generating a solution. The incorporation of arts and innovation into traditional STEM based subjects will help increase uptake into this area and it is something I am keen to progress further.

Stephen Roberts, NNL Risley, stephen.r.roberts@nnl.co.uk

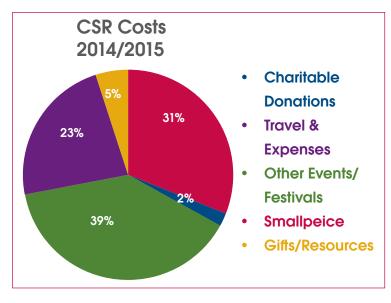


I cover the area around Sellafield and have been involved with each of the Whitehaven Festivals since starting with NNL, 3 years ago. I am very keen to see how we can involve creativity with our STEM work helping to broaden the appeal of these subjects and increase uptake. At the festival this year, we linked engineering with paint production and The Big Bang festival was another super event providing an opportunity to show the breadth of NNL's work – in that case, how power sources for space can be made using americium separated from stored plutonium.

Simon Walker, NNL Sellafield, simon.x.walker@nnl.co.uk

# **Activities and Impact**

At NNL we monitor data on how we spend our Corporate Social Responsibility resources and the sort of activities which we support.



At NNL we sponsor festivals such as the Lancashire Science Festival, the "Amazed by Science" Festival in Cheshire and the Whitehaven Festival which has a strong STEM component.

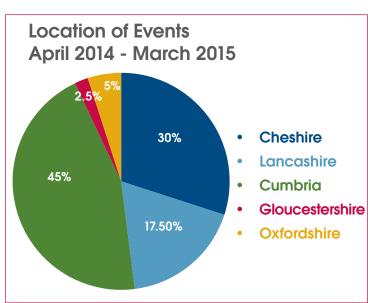
Additionally we support a wide range of other events in many different ways. Plus we inevitably need to spend some of our funding on travel and accommodation costs for our

participants, and on resources and gifts to share with the participants at events.

The chart below titled 'Location of Events' shows the split of events between different locations. All of NNL's different sites play their part in contributing towards our overall portfolio of activity, and the number of events is broadly in proportion to the number of people we have at each

location.

The bulk of our activities are in the North West of England around Cumbria, Cheshire and Lancashire – the homes of our major sites. The split of our funding is broad, as shown in the chart 'Location of Events' (right). Our single biggest recipient of funds is the Smallpeice Trust with whom we arrange and run a series of week-long courses each year.





"Being involved with CSR allows NNL to give school kids an experience of what engineering in the nuclear industry is like and hopefully inspire them to consider a career in a STEM subject. It's great to see kids getting excited about science and wanting to learn more about the opportunities that are out there. I find it very rewarding to be able to deliver projects that show how much fun science and engineering are and that help kids understand what they are able to achieve if they put their minds to it."

# Jo Fagan, CSR Co-ordinator NNL Preston Laboratory

"I am indebted to NNL for their incredible support of our residential course programme. We know our nuclear engineering residential courses enable young people to make informed careers choices. It was great to read in the national press recently about a former student who, having spent a week learning about nuclear decommissioning at Lancaster University with NNL, was so inspired that she decided to apply for a four-year master's in nuclear engineering. She is very clear that she's never regretted her choice. It is great to know we are changing lives."

Kevin Stenson CEO Smallpeice Trust





"It was great to have NNL involved in our Amazed by Science Cheshire Science Festival. Their science buskers are brilliant, they build up a great relationship with their young audience, teach them some real science in a way they will remember and everyone has a great time. It's one of the highlights of the festival."

Katrina Michel
CEO Marketing Cheshire





"I spent a fascinating week doing my dream placement at NNL. I found it extremely interesting and I have definitely achieved the goals which I had set on the preparation day. I feel very lucky to have experienced every part of last week and meeting very important members of NNL who have an extremely important role in the company and listening to their guidance to a career in science. It is called a dream placement for a reason and I was delighted to have experienced every part of it."

Tom Wright
St Bees School

"The support NNL has given to St Benedict's in getting students interested in STEM based careers has been invaluable. In particular the enthusiasm and guidance of the engineers who work with our students on the Engineering Education Scheme, often giving the students their first exposure to industry. It is a joy to watch them as they help the students mature, developing the core skills needed for higher education and the workplace."

Angela Homer, Science Co-ordinator St Benedict's Catholic High School Whitehaven



# NNL Shares Experience and Expertise to help Cumbrian Businesses

Innovus is a project supporting small and medium sized Cumbrian businesses to commercialise their new technologies. Devised and run by NNL and the University of Manchester, Innovus has received over 200 invention disclosures leading to nearly £2 million being invested in innovation, research and development. It has created 13 jobs, with another 200 anticipated to result from investment in its first two years.

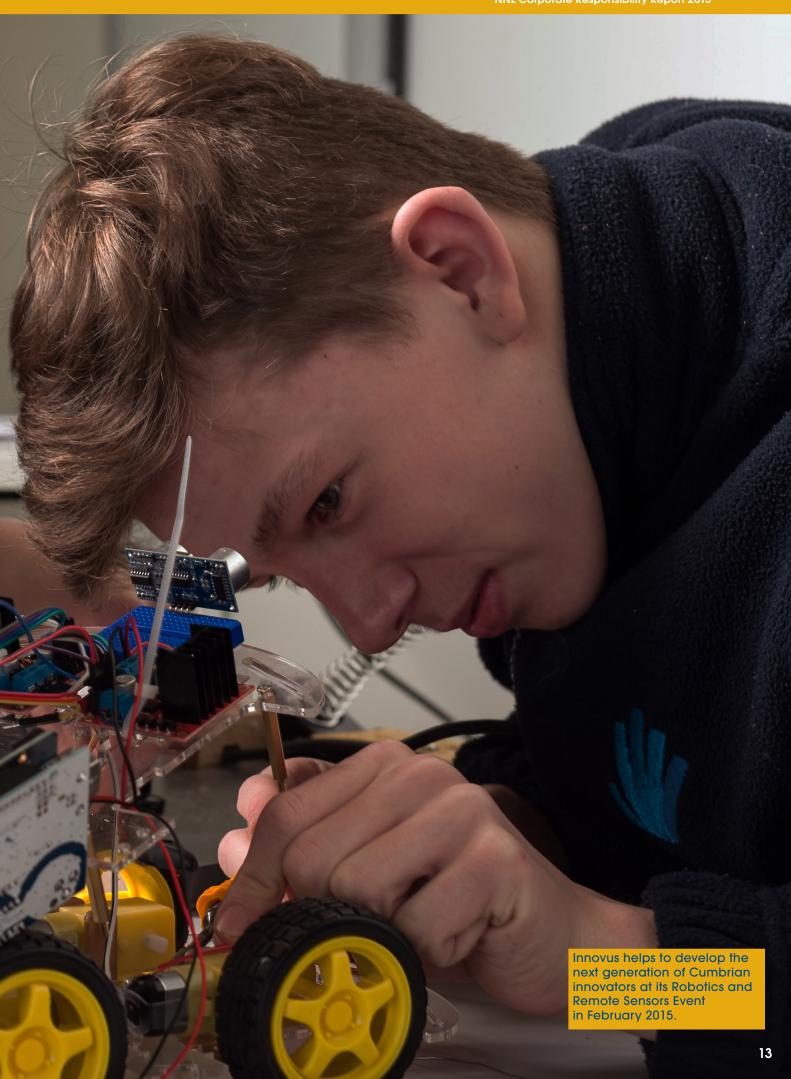
Together with our partners at The University of Manchester's Dalton Cumbrian Facility, we support businesses through the so called 'valley of death', where potentially ground breaking ideas founder on the rocks, unable to get investment and draining time and costs from the companies that seek to develop them.

NNL has a proven track record of addressing industry challenges with innovative solutions and developing those from being bright ideas to industrial

processes. Through Innovus, we help Cumbrian businesses to gain access to world class research and development facilities, to meet industry leaders from a number of sectors and to understand the challenges they face and the opportunities these present. Innovus also provides the opportunity to develop feasible commercialisation plans and to maximise the chances of achieving a successful commercial outcome.

The funding for Innovus has come from Britain's Energy Coast and through the Regional Growth Fund. A successful bid has just been made for further government funding through the Department for Communities and Local Government.

Innovus is another way in which the national laboratory is helping communities around its sites to capitalise on great science and technology, to grow the culture of innovation and research to bring real economic impact.



### **Dr Dominic Rhodes MBE**

One of the driving forces behind NNL's Corporate Social Responsibility programme has been Dr Dominic Rhodes. Here he tells us about how he first got involved in working with young people, his various experiences and his reaction to being awarded an MBE.

I first got involved in CSR work back in 1995. I joined BNFL at Sellafield in August and within the first

month I had a meeting with my mentor, who

asked if there was anything in particular I wanted to do while I was with the Company. I replied that I wanted to go into schools and engage with some of the children. As a result of that, I was put in touch with a man called Ian Lupton who was running an engineering club at St Benedict's School in Whitehaven.

There didn't seem to be anyone doing the sort of schools engagement I thought needed to be done, so rather than wait for it to happen I started to do it myself.

From those beginnings we ended up on BBC's Robot Wars and on Tomorrow's World Live. The Robot Wars team comprised four 11-year old schoolboys. Each one of them is now working as an engineer somewhere in the world. I went on to be awarded the Leonardo Award for Engineer of the Year (in 2000), and by then BNFL was involved in running the after school engineering club. A youngster called Chris Marr was a protege of mine who came through that club, then came to BNFL for work experience and ended up joining the company. He's now with NNL.

For their part, St Benedict's became one of only four schools in the country to be awarded Special Status in Engineering, and through the excellent work of a team of STEM Ambassadors, much of the work we did at St Benedict's was also shared around a number of other local schools in the area. I'm sometimes asked what I get out of all the CSR work I've done. For me, it's easy – I think young

students and school kids are the most important people we ever engage with. It's hard work, but it's also good fun and you learn so much from the students.

It's such an amazing opportunity to make a positive difference to someone's life. Having the

right experience as they are making

study and career choices can really turn someone's life around. I have just written two references for students looking to enter Apprenticeships, and I've known them both since they were around 12 or 13.

It's also great to work with our own younger employees who take the lion's share of the CSR workload. Often I can see them developing and growing in confidence as much as the schoolkids. We use NNL graduates to help run Smallpeice Trust Courses (4 day residential programmes) and it's great to then see some of the people who've been through those go on to graduate as nuclear engineers. What we've been able to do for them has been truly life-changing!

I'm also sure that some of the work NNL has done has helped to boost the number of students applying to study nuclear courses at university. At events such as the Whitehaven Festival, for instance, we've had close to 7000 young people through our activities over a weekend. Even the celebrity chefs were

tweeting about NNL's science buskers!

When I heard I'd been nominated for an MBE, it was my turn to experience my own life-changing event. I never dreamed that a lump of metal could make such a difference – every day it has some impact on things. It's opened up lots of conversations and lots of doors. I'm especially pleased as my father was awarded an MBE himself some years ago for his work in the Royal Air Force. Mine is also one of the first for services to science, which is nice.



Winner 2004 - 2008, 2010 - 2011, 2014









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