

Scientists reveal huge new areas of threatened fog-generated ecosystems in Peru and Chile

- New scientific paper uses 20 years of satellite imagery and cloud computing technology to see through fog and cloud layers, mapping this desert ecosystems in Latin America in detail for first time
- Data will help government authorities to manage and protect the fog oasis as biodiversity and ecosystems resources vulnerable to threats from climate change and development

In a new paper, published today in the International Journal of Applied Earth Observations and Geoinformation, scientists used over twenty years of satellite imagery, supported by two decades of fieldwork verification on the ground, to reveal the true extent of the desert fog oasis ecosystem running along the coast of Peru and Chile.

Their results show that fog oases are much more extensive than previously believed, rich in endemic plants found nowhere else. These findings highlight how ecosystem loss is greatly exacerbated by a lack of distribution knowledge and the interrelated lack of protection.

Peru and Chile's fog oasis ecosystems, known as the 'Lomas' or 'fog oasis' locally, appear like 'islands' of vegetation along the 3000km hyper-arid desert coast of the two countries. Entirely dependent on sea-generated fog for their moisture, this ecosystem is packed with unique and useful native plants which provide a wealth of vital ecosystem services.

Until recently however, they had been poorly recorded and recognised by satellite data, due to their ephemeral nature and almost blanket fog cover when they are most productive. Outside the larger urban areas such as Peru's capital Lima, this has prevented their discovery and conservation, whilst a lack of long-term funding for research has inhibited protection.

To address this, a team of scientists from the UK, Peru and Chile, used hundreds of MODIS satellite images to penetrate two decades of fog seasons, and like an X-Ray, reveal hidden layers pulsing with life across the desert landscape.

This plant productivity mapping, combined with on-the-ground surveys, meant scientists could build up a picture of where the fog oases occur and how they are affected by climate and landscape. The technology and repeated fieldwork allowed the researchers to discover and map over four times more fog oases than previously recorded, with a productive area of over 17,000 km² (10 times the size of London), revealing extensive little-known plant and animal habitats, many with few or no scientific records.

Justin Moat, scientist at the Royal Botanic Gardens, Kew and lead author of

the paper says:

Clearly fog-driven ecosystems are truly amazing, globally very rare, and must be conserved at all costs. What many don't realise is that over 58% of Peru's population live alongside (or within) this unique ecosystem, so they are vital for water, clean air, culture and human wellbeing.

The ecosystem also houses many endemic species including wild tomatoes, medicinal plants, and animals such as populations of Andean Condor, foxes, lizards and wild llama (guanaco).

However, these endemic-rich fog oases, means the ecosystem is intrinsically linked to coastal climatic factors and ocean currents which makes them extremely sensitive to natural and human induced climate change.

Oliver Whaley, a scientist at RBG Kew who has worked in Peru for 25 years, says:

As many fog oases are not mapped and at times only flourish for a single season every few years, they are subject to a host of threats including urbanisation, mining, invasive plants, overgrazing and off road vehicles. We see this both on the ground and from satellites, even after many years Dakar rally tracks are still visible in this fragile ecosystem.

The global community must support Peru and Chile governments and local researchers to protect fog-oases now, before it is too late, and millions of years of evolutionary history and natural capital is lost – incredibly only 4% of fog oases are protected.

Peter Clements, Deputy Head of Mission and General Consulate, Lima Peru, says:

These are indeed remarkable findings. This study brings out the importance of Lomas for water, biodiversity and environmental balance. This is a great example of scientific collaboration between the Royal Botanic Gardens, Kew, one of the UK's leading organisations on biodiversity and conservation, and Peruvian researchers.

The study represents a first step towards protecting this vital ecosystem. The British Embassy in Lima will continue supporting Peru's efforts towards mitigation and adaptation to climate change, including the initiative to create its first national botanic garden.

What now? The fight to protect the fog islands teeming with biodiversity

In the paper, the scientists aimed to summarise all knowledge of biodiversity, threats and protection of this unique ecosystem, so that when combined with a detailed map it can provide new data to help protect the fog oases and increase understanding of how they function.

The researchers are working to establish a protected continental coastal network to allow fog oases to be permanently protected, monitored and restored. It is hoped this ecological biome network can be used to gauge ENSO and climate change, using ecosystem and species fluctuation indicators it may be possible to predict precipitation and maritime climate intensity, for example.

This new data-driven mapping of fog oases will help researchers work with Peruvian and Chilean government agencies, to better locate permanent and ephemeral habitats using online maps. Presently with the leverage of a grant from The National Geographic Society, the team is working with the Peruvian government to establish protected areas and a concession for conservation. Already using the combination of drone mapping, historical satellite analysis, and detailed groundwork of the team, has helped provide delimitation for Reserva Nacional San Fernando critical plant habitats. The area is already seeing a slight recovery of a highly endangered Guanaco population, providing reasons for hope.

Alfonso Orellana-Garcia, scientist and ecosystem management specialist at Peru's National University of San Marcos and co-author of the paper says:

We hope this new data will help Peruvian and Chilean government officials give the Lomas a special and effective protected status, something myself and our partners in Chile and the UK have been fighting for in wide inclusive community collaboration for over two decades.

Likewise, this research is very important to help provide data to support technical and scientific efforts with environmental authorities (GORE ICA) and institutions in environmental, forestry and wildlife including MINAM, SERFOR, SERNANP, INIA; among other entities, who make critical decisions to protect our biodiversity and ecosystems locally and nationally.

Carolina Tovar, a Peruvian ecologist working at RBG Kew and author of the paper says:

Working with our Peruvian colleagues we are very close to having a very fragile and most unique fog oases protected after years of work, providing the evidence of its value to nature and people. As we lead up to the critical COP26 discussions this year,

highlighting the importance of preserving and understanding the biodiversity around us couldn't be more crucial.

Nature is a valuable and often underappreciated resource; we know that plants and fungi offer many solutions to the challenges we face. Saving areas such as the fog oasis of Peru and Chile, full of untapped and unknown species and ecosystem resources, would be one step in the right direction.

Full list of institutions involved in this research

Royal Botanic Gardens, Kew, UK; Universidad Nacional Mayor de San Marcos, Museo de Historia, Natural and Facultad de Ciencias Biológicas, Lima, Peru; Huarango Nature, Lima, Peru; Biota Gestión y Consultorías Ambientales Ltda, Chile; Royal Botanic Garden Edinburgh, Edinburgh, UK; Centro del Desierto de Atacama, Pontificia Universidad Católica de Chile, Santiago, Chile; Universidad Continental, Cusco, Peru; Proyecto para la conservación, gestión y rehabilitación de los ecosistemas frágiles de lomas en Lima (EbA Lomas) SERNANP – PNUD, Lima Peru; Rainforest Concern, Bath, UK; Fundación Chilco, Santiago, Chile.

About the Royal Botanic Gardens, Kew

The Royal Botanic Gardens, Kew is a world-famous scientific organisation, internationally respected for its outstanding collections as well as its scientific expertise in plant and fungal diversity, conservation and sustainable development in the UK and around the world. Kew Gardens is a major international and a top London visitor attraction. Kew Gardens' 132 hectares of landscaped gardens, and Wakehurst, Kew's wild botanic garden in Sussex, attract over 2.5 million visits every year. Kew Gardens was made a UNESCO World Heritage Site in July 2003 and celebrated its 260th anniversary in 2019. Wakehurst is home to Kew's Millennium Seed Bank, the largest wild plant seed bank in the world, as well as over 500 acres of designed landscapes, wild woodlands, ornamental gardens and a nature reserve. The Kew Madagascar Conservation Centre is Kew's third research centre and only overseas office. RBG Kew receives approximately one third of its funding from Government through the Department for the Environment, Food and Rural Affairs (Defra) and research councils. Further funding needed to support RBG Kew's vital work comes from donors, membership and commercial activity including ticket sales.

[**Health Secretary opinion piece in the**](#)

Daily Telegraph

This past year has been the most difficult in living memory for our country – and we have faced those difficulties together. The British people have made unprecedented sacrifices to our freedoms and our way of life to keep each other safe.

Whilst staff in the NHS and across social care have moved mountains to help those who needed care. They have treated over half a million patients with COVID-19, administered over 90 million life-saving vaccines, and cared for the elderly and most vulnerable in our society.

Despite these efforts, it was inevitable that this global pandemic would take its toll on a system that was already in need of reform. We now have a backlog of 5.5 million people waiting for treatment – and if we were to continue with business as usual this could rise in the coming years to as high as 13 million. Before the pandemic, we treated nine in 10 people within 24 weeks. That has now risen to 45 weeks.

The pressures of the pandemic have also been stark in social care, adding to the burdens of an unfair system in crisis. Around one in seven people end up paying over £100,000 for care, and often the heaviest burden falls on those least able to bear it. Meanwhile, staff in social care have worked tirelessly, even when we know they could have benefitted from better support and training.

No responsible government – especially a Conservative one – can bury its head in the sand and pass these problems onto the next one.

The Health and Care Levy announced yesterday will be a direct investment into the NHS and social care. But I appreciate it does not sit easily with everyone. No government would ever wish to go back on a promise it has made to the people – and I've always believed in making sure the tax burden is as low as possible.

Yet no government since the Second World War has faced unprecedented challenges of such magnitude. Last week I met health ministers from the world's biggest economies at the G20: we are all having to deal with the consequences of this global pandemic. I am determined we face up to them.

We want the NHS to be a world-class service, and we need to put social care on the strongest possible foundation for the future. But we have to do that in a responsible way. That means spreading the burden across the broadest shoulders, and not simply borrowing in the short-term to pay for the long-term. That is what our levy does: it shares the burden across employers, employees and pensioners alike. The highest-earning 14 per cent in the country will pay over half the levy.

Together, we are making a critical investment in our country's future. This will be the biggest catch-up plan in NHS history – delivering nine million

more checks, scans, and treatments. We all know someone who has been waiting to long for such procedures.

We are going to ensure the vital work of routine operations, meaning things like hip replacements and cataract surgery do not stop. We are also investing in the next generation of scanners and screening equipment, so we are even quicker at finding and treating diseases like cancer.

The levy is also a vital first step for the reform of our broken care system. No one will have to pay more than £86,000 in care costs over their lifetime. That cap will apply to everyone – it will not matter what condition you have, where you live, how old you are or how much you earn.

We are also casting out the safety net further by expanding means-tested support, so many more people can benefit from having the costs of their care covered. In addition, care staff will now benefit from half a billion pounds of funding to deliver new qualifications, better career routes and much-needed mental health and wellbeing support.

Through these historic investments we are meeting the scale of the challenges we face together, just as we have done throughout this pandemic. In making these difficult decisions we are stepping up as a country to end the cruel care lottery and tackle the backlog. As a result, millions more people now have a better chance to live happy, healthy and dignified lives.

Innovation and new technology to help reduce NHS waiting lists

- This week's record investment for the NHS will see the health service deliver an extra 9 million checks, scans, and operations
- Surgical hubs, virtual wards and Artificial Intelligence key to tackling the backlog and putting NHS on sustainable footing
- New treatment, diagnostic, and surgical methods to see more patients quickly and safely

Local surgical hubs, new technology to speed up diagnosis, and innovative ways of working will help the NHS to tackle growing waiting lists and treat around 30% more patients who need elective care by 2023/24.

Backed by a new £36 billion investment in health and social care over the next 3 years, 'doing things differently' and embracing innovation will be the driving force to get the NHS back on track.

The funding will see the NHS deliver an extra 9 million checks, scans, and operations for patients across the country, but it's not enough to simply plug the elective gaps. The NHS will push forward with faster and more

streamlined methods of treatments.

Surgical hubs already being piloted in a number of locations, including London, are helping fast-track the number of planned operations, including cataract removal, hysterectomies and hip and knee replacements, and will be expanded across the country. Located on existing hospital sites, surgical hubs bring together the skills and resource under one roof while limiting infection risk and providing a COVID-19 secure environment, with more planned to open in the coming year.

Health and Social Care Secretary Sajid Javid said:

This global pandemic has presented enormous challenges for the NHS and led to a growing backlog – we cannot go on with business as usual.

We are going to harness the latest technology and innovative new ways of working such as surgical hubs to deliver the millions more appointments, treatments and surgeries that are needed over the coming months and years to tackle waiting lists.

Professor Steve Powis, NHS England medical director, said:

Although the pandemic is still with us and we will have to live with the impact of covid for some time, the NHS has already made effective use of additional resources to recover services — from adopting the latest technologies to more evening and weekend working, NHS staff are going to great lengths to increase the number of operations carried out.

The further funding announced this week will support staff to deliver millions more vital checks, tests and operations, so if you have a health concern, please do come forward to receive the care and treatment you may need.

The NHS has been trialling a range of new ways of working in 12 areas, backed by £160 million, to accelerate the recovery of services. This includes setting up pop-up clinics so patients can be treated quickly, in person, and discharged closer to home, as well as virtual wards and home assessments to allow patients to receive medical support from the comfort of their home, freeing up beds in hospitals.

GP surgeries are using Artificial Intelligence to help prioritise patients most in need and identify the right level of care and support needed for patients on waiting lists.

Using the latest technology and locally led innovation will increase efficiencies, make every penny count and increase activity levels to tackle rising backlogs. Key examples include:

- Moorfields Eye Hospital has successfully used surgical hubs to reduce the time cataract patients spend in hospital to around 90 minutes and carried out 725 operations in one week, while Nottingham NHS Trust launched 'Super Saturdays' where NHS staff perform that same procedure all day to reduce changeover times for equipment and staff.
- Surgical robots are being used in Milton Keynes hospital to deliver more complex surgery with faster recovery times for patients, less time in hospital and reduced risk of infection. It was the first hospital in Europe to use the Versius Surgical Robotic System for major gynaecological surgery, including complex cancer cases.
- A project launched in Coventry supports the West Midlands Ambulance Service from frail patients and has led to a 20% drop in the number of people over 80 being admitted to hospital when they could have been better cared for elsewhere.
- Doncaster Bassetlaw Hospitals Trust is operating a cardio drive-through service as part of 'Hospital at Home' programme. Patients arrive at Doncaster Royal Infirmary or Montagu Hospital by car and receive an ECG heart monitor device from a member of staff. The new drive-through service means more heart checks can be carried out each day, with around 100 conducted each week, freeing up space in hospital for essential tests which must be carried out face-to-face.

The latest cancer tests being deployed across the NHS are also helping speed up diagnosis and spot cancer early on, and thanks to the hard work of staff, a quarter of a million people were checked for cancer in June – the second highest number on record – and more than 27,000 people started treatment for cancer in the same period.

There are currently a record 5.5 million people waiting for non-urgent treatment and surgery, and around seven million patients in England did not come forward for treatment during the pandemic. The waiting list could potentially reach 13 million by the end of the year if left unchecked and it may take the NHS up to a decade to clear treatment backlogs without concerted action.

The new UK wide £36 billion investment will support the NHS and social care systems in England in the long term and ensure patients have ongoing access to the best possible care.

The NHS will receive an extra £5.4 billion over the next 6 months to support its response to COVID-19. This includes an extra £1 billion to help tackle the COVID-19 backlog, £2.8 billion to cover related costs such as enhanced infection control measures to keep staff and patients safe from the virus and £478 million to continue the hospital discharge programme, freeing up beds.

The additional £5.4 billion brings the government's total investment to

health services for COVID-19 so far this year to over £34 billion, with £2 billion in total for the NHS to tackle the elective backlog.

It is also additional to the historic long-term settlement for the NHS, which is enshrined in law and will see NHS funding increase by £33.9 billion by 2023 to 2024 as part of the NHS Long Term Plan.

The health service will come forward with a delivery plan for tackling the backlog to give people confidence that the money being invested is going to deliver results.

[Fiona MacGregor's speech: CIH Housing 2021 – 8 September 2021](#)

Introduction

Thank you Chan for the welcome.

It's good to be together in person, to reflect on the past 18 months and timely to discuss how that and the range of challenges facing the sector will shape what we all do and how we do it over the months and years ahead.

There is a lot to discuss. Government will carry out a Spending Review in the autumn. The review of the Decent Homes Standard is underway, government is continuing to develop and implement policies to decarbonise housing as part of the longer-term trajectory to net zero and the Building Safety Bill is making its passage through Parliament.

Providing new homes remains an important priority, the need for new affordable housing evidenced by the 1.1 million households on waiting lists. Some of you may be involved in the Affordable Homes Programme strategic partnerships announced by Homes England last week, or receiving GLA funding. And, it will be crucial to achieve the aims set out in the Social Housing White Paper.

Consumer regulation

I want to start with that.

As you know, the central aim of the social housing white paper is to reset and rebalance the relationship between landlords and tenants, for tenants to be safe in their homes, that these homes meet good quality standards with repairs and other issues dealt with promptly and properly with clear routes of redress when things go wrong, and to be listened to and treated with respect by their landlord. In short, the basics.

The last 18 months have been unprecedented. Covid-19 meant that social housing providers had to adapt how they delivered housing services in ways the sector has not seen before. The pandemic also highlighted the importance of home – for everyone. Providers’ responses required good data to identify risks to tenant safety from restricted services and to ensure checks and inspections are up to date and that remedial actions are completed in a timely manner.

The pandemic also saw providers adapt their communications with tenants, focus on the range of diverse needs and ensure that vulnerable tenants were identified and support offered.

There were also many good examples of providers sharing experiences, learning and good practice.

But it was always clear that coming out of lockdown was going to bring further challenges: dealing with the impact of everyone spending more time in their homes, with backlogs of both planned and responsive repairs to be caught up, compounded by labour and materials shortages and cost increases as well as heavy competition in all sectors for staff, including those providing care and support.

And as you all know, those challenges are being faced in the glare of unprecedented media attention on the sector and the quality of the homes and services it provides.

Many of you may have heard from our new Director of Consumer Regulation Kate Dodsworth earlier today. If you did, you will have heard it is going to take time to implement the new approach to consumer regulation set out in the White Paper. New legislation is needed to give us the necessary remit and powers.

And all of you will have heard over the last few years our “don’t wait” message. In advance of legislation, we expect providers to take action to deliver the aims of the White Paper: ensuring that residents live in good quality homes and are listened to when things go wrong. Don’t wait for the regulator to have the powers to enforce this.

Recent media coverage has highlighted this in the most uncomfortable of ways. We have all been appalled and ashamed to see some of the conditions that have been highlighted, and what that means for affected tenants.

“Don’t wait” means focussing now (demonstrably) on the “3 Rs” – repairs, redress and respect. And transparency. All essential to building, or re-building, trust.

We published our latest Consumer Regulation Review yesterday and set out some of our findings and learning from our consumer regulation in 2020/21. There is scope for further learning from recent casework.

We’ve been saying for some time that the fundamental relationship is that between landlord and tenant – that is at the heart of the White Paper – re-balancing that relationship. It is unlikely to succeed if an effective repair

service is not being delivered.

At its most basic, tenants need to know how to report repairs and have confidence that when they do so, appropriate and timely action will be taken – and if things go wrong, they will be given an explanation and will be treated with respect and courtesy.

Tenants also need to know how to raise a complaint, have confidence in a simple and fair process and be aware of the role of the ombudsman if they consider their complaint has not been handled effectively.

And if some tenants might need additional support with such matters, are you as landlords identifying and reaching out to those tenants – building on some of the good work seen in the pandemic.

There is undoubtedly also scope to do more to proactively identify themes and trends – joining the dots on repairs requests and using complaints as a source of intelligence and rich data.

And we all know that there can be a range of complex factors involved in ensuring some homes are of decent quality and kept in good repair, including the complexity of the built form or (and?) the age – where properties are reaching the end of their useful life. As well as getting the balance right in ensuring properties remain of a suitable standard for tenants, be transparent – keep tenants, regularly, informed of issues and investment plans.

We know that many already do some or all of the things I've just described.

Where you are already doing so, talk about it – tell your tenants, but also share good practice and learning within the sector. There is no room, or need, for competition or even schadenfreude – it does not serve the sector well, does nothing to help address stigma, and risks “there but for the grace of” territory. Sharing learning and ensuring transparency is why I've asked Clarion to publish the lessons learned from the Eastfields estate once that exercise has concluded, and they have agreed to do so.

Taking account of the learning in the Consumer Regulation Review, and of sharing and implementing learning among landlords, will all support the sector to be prepared to meet the requirements of the new consumer regulation regime when it is implemented.

For our part, we are working towards the design of a revised consumer regulation framework. We will need to make decisions about three broad areas:

- changes to the standards that providers should meet;
- how we can gain assurance on whether providers are meeting the standards and respond if they are not;
- and a set of tenant satisfaction measures that will help tenants and us hold landlords to account.

We will continue to engage with providers, tenants and other stakeholders as we develop these three elements and undertake several statutory consultations

over the next couple of years.

We are working to a faster timetable on tenant satisfaction measures because of the lead-in time for collecting any new data.

Those have a dual aim: to provide tenants with greater transparency about their landlord's performance, and to inform us, about how a landlord is complying with the consumer standards.

Although, understandably, there is much interest in what proactive consumer regulation will look like, changes to regulation are only part of the picture. It is even more important for providers to focus on developing and maintaining the right organisational cultures.

And we will build on the principles that work well on our economic regulation. We will continue to be assurance-based, and undertake our role in a proportionate, risk-based and outcome focused way. We remain committed to co-regulation. Board members and councillors remain ultimately responsible for ensuring that they provide quality accommodation and services to their tenants and comply with our regulatory requirements.

Financial context

Whilst we are all wrestling with the white paper agenda, we cannot lose sight of the many economic challenges and financial pressures facing the sector. It is grappling with investing in its existing stock, whilst building more homes (at a time of increasing cost pressures and labour shortages). And over the longer term, how to deliver the zero-carbon agenda and to ensure that they can continue to build new homes through the economic cycle.

Nonetheless, the sector's fundamentals – cashflow, asset base, demand – remain strong. The sector remains an attractive place for private capital – especially capital seeking strong ESG performance – and we are seeing that reflected in the pricing of debt for traditional housing associations. Total new finance agreed in 2020-21 amounted to £15.1 billion, the highest ever recorded.

We are currently looking at this year's business plans. Again, the headlines are encouraging. Providers' development forecasts have recovered their upward trend alongside increasing levels of investment in existing homes. The notion that the sector cannot deliver on building safety and stock improvement as well as delivering new supply appears to be an overly stark dilemma.

However, in the current debate about funding new social housing supply there is some confusion between financing and economics. There is no shortage of finance, and most providers have the capacity to raise more debt. Too often we see so called 'innovative solutions' trying to solve a problem that does not currently exist. There is no shortage of available capital, but the difficult economic problem is generating sufficient return on that capital from sub-market rents whilst paying market prices for land and development. The recent Affordable Homes Programme announcement will clearly help with the economic conundrum to some extent, but our review of business plans shows how

the desirable and necessary investment in, new supply and existing homes can gradually erode the financial and economic capacity of providers; which is leading some to try and find other ways to fund their business plans.

The arrival of new providers, including some for-profit models also raises the prospect of new entrants unencumbered by the need to invest in existing stock. But, new models with higher expected rates of return still face the same challenges (arguably even greater challenges) when it comes to making the development economics of affordable housing stack up.

Of course, the right approach to financing for each provider will depend on the particular investment challenges they face and which investments each provider chooses to prioritise. In this context clarity of purpose and communication are essential. Individual providers need clarity on their priorities to enable effective decision making and to explain the choices they are having to make, taking their tenants (and investors) with them.

Conclusion

The backdrop is complex for providers, navigating uncertainties and making decisions on how they will meet their core purpose and how they will apply resources to meet the range of demands they face. Whether that is improving the safety and energy efficiency of existing homes or providing new homes for future tenants. Choices made by providers and their boards affect the safety and security of tenants, and the ability of future tenants to have a place that they can call home. Choices made, and how they are communicated, also speak to the culture of individual organisations, and will significantly impact the reputation of the sector as a whole.

So, while delivering new homes to meet unmet need is as critical as ever, that should not be at the expense of the quality of existing homes.

There is much that landlords can do to get on the front foot – to find issues and ensure tenants have confidence that it is worth reporting repairs; triangulate where possible through identification of themes and trends – and fixing issues promptly and effectively wherever possible. And be transparent about complexities, pressures, delays or where things go wrong. But find them before others do it for you. And fix, wherever possible, issues before they escalate, which leads to trust breaking down and established routes to redress being circumvented.

Where things do break down and there is evidence of failure at organisational level please be in no doubt that we will call breach where we consider that it exists. We will not be influenced by size of organisation or by type of organisation. We will do our job in line with our role and remit – and will not succumb to pressure from any quarter – whether that pressure is to call, or not to call a breach.

No one wants it to come to that, and no landlord sets out to provide a poor service. But this is, and should be, all about services to tenants, not about regulators or roles or remits.

[Why geological disposal is necessary](#)

News story

A short new online documentary from the BBC describes why radioactive waste exists in the UK, how it's being dealt with and the role of nuclear power in the context of global climate change.



Dr Claire Corkhill (courtesy of the BBC)

Made in partnership with the Open University, the film interviews waste specialist Dr Claire Corkhill and other academics, who discuss our existing radioactive waste and the need for a disposal system located deep underground, where the most hazardous wastes would be safe for hundreds of thousands of years while the radioactivity decays naturally.

Dr Claire Corkhill explains what radioactive waste looks like (courtesy of the BBC)

The film looks at [Finland's repository](#), currently under construction, and uses graphic illustrations to depict a typical underground system similar to RWM's planned Geological Disposal Facility (GDF) that will feature highly engineered tunnels and vaults.

BBC short feature: [Rethink the Future, episode 8, The Nuclear Dilemma BBC](#)

RWM is in the process of search for a suitable UK location, based on seeking consent from a local community together with a site that meets all the stringent criteria.

This is in line with the [UK Government's Implementing Geological Disposal – Working with Communities Policy](#), which states that a GDF will only be built where there is a suitable site and a willing community. RWM has responsibility for the planning and implementation, and more information can

be found [here](#).

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