

---

**GLOBAL PERSPECTIVES**

**9766/03/PRE**

Paper 3 Presentation

**October/November 2015**

PRE-RELEASE MATERIAL

**To be given to candidates**

---

**READ THESE INSTRUCTIONS FIRST**

**Guidance for Teachers**

This Resource Booklet contains stimulus material to be used by candidates preparing their presentation for 9766/03. One copy should be given to each candidate.

Presentations must be prepared in a four-week period. This may take place at any point before 31 October 2015, by which date all presentations must have been submitted to Cambridge.

The Presentation is marked out of 40.

**Instructions to Candidates**

- You should use the enclosed stimulus material to help you identify the subject for your presentation.
- Your presentation should attempt to answer a question.
- Your presentation must address alternative perspectives on the question you select and must engage directly with an issue, an assumption, evidence and/or a line of reasoning in one or more of the documents within this Booklet (i.e. you should not just pick an individual word or phrase which is not central to the reasoning of or the issues covered by the documents).
- You are expected to reflect on these perspectives using your own research.
- Your presentation should be designed for a non-specialist audience.
- Originality in interpretation is welcomed.
- Your presentation may be prepared in a variety of formats and should normally include an oral commentary.
- The speaking or running time of your presentation should be a maximum of 15 minutes.
- Whether presented or not, the submission must include a verbatim transcript of the presentation.

---

This document consists of **13** printed pages and **3** blank pages.

## Document 1

### 'The e-waste blight grows more dangerous than ever'

**Adapted from an article by Jeffrey Kluger in *Time*, a US magazine, November 2011. Jeffrey Kluger is *Time's* senior editor for science and technology reporting.**

There's nothing that thrills tech-lovers more than the latest Shiny New Thing. In the first three quarters of 2011 alone, 55 million iPhones were sold. That's a lot of Shiny New Things.

The problem is, Shiny New Things quickly become Familiar Old Things, and nothing seems so discardable as a poky device that no longer runs the latest apps or includes the coolest features. In the U.S. alone, hundreds of millions of old phones, computers and other hardware are junked each year — and that's a real problem. It's hardly news by now that electronic devices contain all manner of toxic metals including lead, cadmium and mercury. Nor is it a surprise that mountains of this high-tech junk wind up in developing countries, where they are scrounged for raw materials for resale. International accords forbid unregulated shipments of First World e-waste to Third World destinations, but the rules are routinely flouted and a thriving gray market has sprouted up, allowing the junk to travel freely around the globe.

Now, a study in Ghana — ground zero in the e-waste mess — reveals how toxic the problem can be. Soil, air and other environmental tests conducted by Ghanaian researcher Atiemo Sampson at a school, church, soccer field and produce market near an open-air e-waste scavenging site found that levels of eight metals — iron, magnesium, copper, zinc, cadmium, chromium, nickel and lead — were up to 50 times higher than in uncontaminated areas. Some of the toxins seep through the soil; more still pour into the air when waste is burned.

"Until now, Ghana has not regulated the importation of e-waste," Sampson said in a recent presentation to a U.N.-run multi-disciplinary group called Stop the E-Waste Problem (StEP). "Rules are only now being incorporated into our national legal framework."

Ghana is not only an example of how severe the e-waste pile-up is becoming everywhere in the developing world — all the more so as the commercial arms race among electronic giants escalates, with new products being introduced all the time — but how tricky it can be to set things right. The root of the problem, as with so many things, is poverty.

Electronics are scavenged not because locals like wading hip-deep in e-waste, but because there's gold to be found in the junk — literally. A mountain of 100,000 cell phones contains an estimated \$130,000 worth of scrap gold. That's along with \$100,000 worth of copper and \$27,000 worth of silver — a cool quarter of a million dollars in all. Impoverished communities rely on the rubbish as an income source, and governments that can't provide for them any other way thus wink at e-waste importation. In 2009, Ghana imported 215,000 tons of electronics, 70% of which was used and destined for the trash heap.

"The sheer number of people engaged in informal recycling ... makes it increasingly unthinkable politically to eject them," Sampson said. "Any solution must recognize their role and focus on improving health, safety and environmental standards."

StEP agrees, and recommends both formalizing and regulating how recycling is done, so that people in need of the work can continue to do it, but in a way that's safe for themselves and their surroundings. That's easier to say than to do, of course. Of all of the ways an economically struggling country can spend its limited money — health care, schooling, feeding its people — building an e-waste recycling plant does not rank terribly high. Umicore, a Belgium-based materials-processing company, has constructed one such model facility near Antwerp, but that hardly meets the needs of poor Ghanaians.

A cleaner solution — though one that eliminates the income stream that comes from ad hoc recycling — is for electronics companies to design their products with toxic metals in mind, both limiting the quantity they use and making it easier and safer to extract them. StEP applauds Philips electronics for being an early leader in such “life cycle thinking.” Consumers also need to get smarter. Discarding rechargeable batteries when they no longer work contributes cobalt, nickel and other metals to the waste stream. Retailers and other collection centers often have drop boxes for safe recycling.

The electronics revolution is not going to be slowed — much less stopped or reversed. And at almost all levels — commercial, social, creative, political — that’s a very good thing. It’s only the environmental piece that, as so often happens, is getting neglected. Staying wired and staying green is not easy — but for the sake of public health, it’s essential.

**Document 2****'Time to plan for the e-menace'****An article in *The New Times*, a Rwandan newspaper, February 2013.**

Where do old phones, computers and other electronic accessories go? That is exactly what is giving government officials sleepless nights.

Many government institutions opt to auction their obsolete equipment to save space and not for monetary gain, but the practice is like a double-edged sword. Once the equipment goes into public hands, its control or disposal becomes a nightmare.

Once the public has stripped off all things of commercial value, they simply dump the waste anywhere and most of the material making up the equipment is dangerous. Poor e-Waste management can lead to severe health and pollution problems.

The government should therefore come up with sound and appropriate policies before e-Waste becomes a more serious threat.

One of them would be the total ban of importation of used or second hand electronics, even if they are donations, as has been the case in the past. Some of the donations are actually an indirect waste management system by the donors.

Some countries in Africa, especially in West Africa, have become notorious dumping grounds. Recyclable pieces are stripped off the equipment and re-exported as raw material, but the health toll is heavy for those who work in the informal recycling trade.

What Rwanda needs to avoid the West African path is to plan ahead; put in place modern recycling and disposal plants to take care of this new e-Menace that is piling up as society becomes more affluent. We deserve better than being an e-Dumping ground.

### Document 3

#### **‘Extended Producer Responsibility: An examination of its impact on innovation and greening products’**

**Adapted from a report commissioned by Greenpeace International, Friends of the Earth Europe and the European Environmental Bureau, September 2006. The report is authored by Chris van Rossem, Naoko Tojo and Thomas Lindqvist of the International Institute for Industrial Environmental Economics.**

The term ‘Corporate Social Responsibility’ (CSR) is very much in vogue with companies communicating their values and achievements in annual CSR, Corporate Citizenship and Sustainability reports. Organisations and consultancies have been created to rate companies on their corporate responsibility and to advise them on business ethics and the environment, while others, like the Global Reporting Initiative (GRI), develop and disseminate ‘Sustainability Reporting Guidelines’ for voluntary use by organisations reporting on the economic, environmental, and the social dimensions of their activities, products and services.

Images of electronic waste in the form of discarded computers and other ‘electro-scrap’ dumped in Asia, other social and labour issues as well as pressure from civil society, prompted the electronics sector to develop an Electronics Industry Code of Conduct. However, despite this Code, the hi-tech sector continues to produce ever shorter-life, often superfluous products with inherently hazardous materials. Why are hi-tech corporations, which profess to be responsible corporate citizens, allowing this to happen?

One answer is that CSR initiatives, whether they involve Codes of Conduct or reporting guidelines, are voluntary. At best, CSR can be a way for the best companies to lead the way. At worst, CSR initiatives can even be a diversionary tactic, used by industry to pretend that they are taking action and to avoid regulation.

Extended Producer Responsibility (EPR), the subject of this report, is thus a necessary step, if the industry is to become a more responsible corporate citizen. EPR, as a principle of product policy, was first introduced into law in the early 1990s to address the lifecycle issues of products – especially what happens to them at the end of their life – using a target oriented approach, instead of traditional command-and-control type regulation. By extending the responsibility of producers beyond the factory gates and creating economic incentives to achieve set targets for collection, re-use and recycling, manufacturers should become more aware of the issues related to the end-of-life management of their products. Rational manufacturers would presumably try to find a way to minimise the costs associated with end-of-life management by changing the design of their products, to reduce those costs.

So, governments must ensure that any Producer Responsibility law allows the possibility for producers to take individual financial responsibility for their end-of-life products. This requires true financial guarantees for all ‘new/future’ discarded products, i.e. products put on the market after entry into force of EPR legislation. Other requirements should be legally-binding, include bans on using hazardous substances and ambitious targets for collection, reuse and high-quality material recycling – including, importantly, de-pollution requirements.

Legislation requiring producers to take responsibility for their products’ full lifecycle may be the clearest way to discern if corporations are ‘walking the talk’ on their claims of good corporate citizenship. What is more, research in this report shows that those companies which take back their end-of-life products can design cleaner, more resource-efficient products if they are responsible for their own-brand goods.

## Document 4

### 'Computer Aid demands greater e-waste accountability'

**Adapted from an article by Dave Lee on the *BBC News website*, March 2012. Dave Lee is a technology reporter for the BBC.**

Major technology manufacturers must be held more accountable for e-waste costs, a leading UK charity has said.

Computer Aid, which distributes donated tech to communities across Africa, said laws should be put in place to ensure that firms "deal with the consequences" of unwanted equipment.

The call comes as the organisation celebrated sending its 200,000th refurbished PC to the developing world.

Many technology companies run e-waste schemes to help combat the problem.

However, Computer Aid's newly appointed chief executive Tom Davis said more could be done to ensure that technology companies were "good corporate citizens".

"I think that the richest companies in the world, who profit tremendously from IT, have an ultimate responsibility to deal with the consequences of all the things they've brought to us," he said.

Anja Ffrench, the charity's director of communications, told the BBC that dangers of e-waste, which can be harmful when not carefully disposed of, have led countries such as Nepal to reject charitable donations of technology because of health and cost concerns.

"If all countries were to do that they would cut themselves off from receiving technology from other countries, which would be a great shame.

"The organisations that Computer Aid provides to are really disadvantaged organisations who would not be able to afford new equipment. This is their only way to access ICT – through refurbished machines."

Computers distributed by the charity are donated by companies and individuals in the UK. Sainsbury's, the largest single donor, has given 8,000 unwanted PCs to the scheme since 2009.

However, Gladys Muhunyo, Computer Aid's director of Africa programmes, said more still needed to be done to educate the public about the issue at the time they were buying a new device.

"The people who produce the gadgets need to make gadgets that are durable, that you do not have to keep changing," she said.

"Consumers should not just go for new technology without knowing if the old gadget has been exhausted of use, and where it can be taken."

## Document 5

### 'Recycling – Turning trash into cash'

Adapted from an article in *The Middle East Magazine*, a pan-Arab magazine in English, February 2013.

'Do not waste by excess, for Allah does not love the wasters' says the Holy Koran. Yet the recycling industry in the mostly Muslim Middle East still does very little to recycle its waste. With so much desert to spare the temptation has always been to dig a hole in the sand and bury it there, leaving it to a later generation to deal with any toxic consequences. Cheap oil has provided vast economic benefits, especially for the Gulf states, but wealth rarely encourages its beneficiaries to be less profligate. It is a fact of history that rapid economic expansion leads inevitably to more pollution and more waste. An increase in GDP leads to more consumer spending and more industrial output.

However, acknowledgement that oil and gas are finite resources has led the Gulf states to look seriously at diversifying their economies and, as they have done so, it has begun to dawn that the old methods of dealing with waste are unsustainable. In 2011, the UAE launched an initiative to ameliorate the amount of unnecessary waste the country was producing annually. It was estimated that more than half of all waste being dumped at landfills was recyclable. The government issued instructions to all commercial operations to separate their waste into paper, glass, metal and plastics, providing colour-coded containers for them to do so. Legal action could be the consequence for anyone failing to comply.

While the government's actions were welcomed, it was also pointed out that separating and collecting recyclable waste is one thing, selling the waste on profitably to be processed is often quite another. Some processors, for instance, will not accept coloured glass.

It is this struggle to make recycling cost effective that serves as a block to its establishment as a way of life in the region. Left solely to the private sector, sustainable waste management will continue to struggle.

E-waste is an increasing problem in the modern world. Computers, televisions, smartphones – anything electrical – have a short lifespan. The rapid advance of technology renders year-old devices, if not obsolete, easily discarded for the latest model. From plastic to glass to rare earth metals, the vast majority of e-waste ends up in landfills in developing parts of the world such as China. Often the problem is economy of scale. Particularly in the case of rare earth metals, since so little is used in a single unit and it is so difficult to extract and simply not cost effective to do so in low quantities.

Cheaper ways of separating and extracting, especially rare earth metals, are being developed. With no shortage of capital and investment already being made in the region's science and technology sectors, efficient recycling of this kind is an area Middle East governments would do well to pursue. One company, Akhdar, based in Dubai, recognises that the greenest solution to recycling old computers is to refurbish them and find a market to sell them to. If that is not possible, the company separates the materials in the machines for recycling and sends the electronic circuitry to Britain where the rare earth metals are extracted. In both instances, the client receives a percentage of money made.

Businesses are always looking for ways to add value to their products. An increasingly common way of doing so is by means of an active corporate social responsibility operation. In other parts of the world, large corporations especially are competing with each other to display their 'green' credentials', to prove to the general public that they care about environmental matters and that their businesses are ecologically sustainable.

It is easy to be cynical and suggest that what they really care about is profits, but whatever the motivation for their new-found concerns, businesses seen to be taking steps to reduce their impact on the environment find favour with their customers.

There is currently a lack of awareness in the Middle East regarding the importance of recycling. The cultural change that has begun will take a while to catch on, which gives time for the region to catch up on the experience and expertise needed to make a profitable business from recycling and for it to match or even exceed the efforts made elsewhere in the world to live in a more sustainable way.

## Document 6

### ‘Enough’

**Adapted from *Enough: Breaking Free from the World of Excess*, by John Naish, 2009. Naish writes on lifestyle issues for *The Times* newspaper.**

*He who knows he has enough is rich*  
Tao Te Ching (c. 260 BC)

We have some evolving to do. And quickly. We need to develop a sense of enough. Or, if you fancy, enoughness. Or even enoughism. We have created a culture that has one overriding message – we do not yet have all we need to be satisfied. The answer, we are told, is to have, see, be and do even more. Always more. But this is bearing strange fruit: levels of stress, depression and burnout are all rising fast, even though we live amid unprecedented abundance. Our planet doesn’t look too happy, either.

We urgently need to stop over-stimulating the powerful ancient instincts that make us never satisfied. Instead we must nurture our capacities to appreciate the unprecedented wonders now at our feet. In the Western world we now effectively have everything we could possibly need. There is no ‘more’. We have to learn to live ‘post-more’. This isn’t about turning the clocks back or having less. It’s about realising that we’ve arrived (hurrah times three). Enoughness is a path to contentment. It’s about personal ecology, about each of us finding our own sustainable balance as individuals. Enoughness is the tipping point, beyond which getting more of anything makes life worse rather than better.

I’m perched on my wobbly moral plinth here by dint of having spent 20 years trying to live this idea. At first it was the result of personal quirk, of having grown up quite happily in straitened circumstances. My mum was a widow, a child of the Second World War, and our approach to acquiring things carried a strong air of rationing: ‘Is a new xxxx really necessary?’ was the family mantra. Throughout my upbringing we had the same three-piece suite, a relic from my late dad’s bachelor days, though we refurbished it in the pre-green spirit of make do and mend. (I’ve still got the sofa – though it’s now apparently a ‘1950s design icon’.) Over the past decade, my sense of having an inner ration-book has become indispensable as the external clamour for more, more has multiplied. I’ve had to put more effort into deciding what is ‘enough’ for me, to discriminate between new things that might enhance life, and those that will ultimately – despite their glister – detract from the good stuff already in it.

Ultimately I had to start becoming somewhat militant. That’s why I no longer own a mobile phone. I did for a while. It seemed a good idea, but then my work colleagues got hold of the number. The little convenience-enhancer turned into a conduit for constant demands. We don’t have a telly at home either. I do, however, manage to work at the sharp edge of information as a national newspaper journalist and author. Saying ‘enough’ isn’t about self-denial: in our communications-saturated society, if you staunch some of the torrent that jet-hoses us every day, you don’t end up with less useful knowledge. The opposite happens.

Enoughism requires us to defuse the status obsession fostered by constant consumption. As a culture, we need to value different emblems of cool – such as time, space and autonomy – rather than trinkets. But declaring ‘enough’ also demands that you challenge your own internal propaganda. Yes, your brain feels immortal; yes, it whispers that (in the poet Walt Whitman’s words) you can contain multitudes; yes, your brain says that you can have it all and do everything. These egoistic inklings are all turned up loud and proud by consumer culture’s persistent promises of infinite self-realisation. But in fact no, your brain isn’t immortal and you can’t have it all. We are human and limited, and we have to live within our lives’ realistic limits for them to be sustainable and satisfiable.

## Document 7

### 'Is there an ethical laptop?'

**Adapted from an article by Lucy Siegle in *The Observer*, a UK newspaper, October 2012. Lucy Siegle is a journalist and writer on environmental issues.**

The sleekness of the gadgets that dominate our lives gives little hint of the chaos that lies beneath – not just their innards, which include rare-earth materials such as neodymium (magnets) and europium (which makes your phone glow), but their backstories. Most of these materials are mined in Baotou, Inner Mongolia, a place described as “the apocalypse”.

Add on conflict minerals such as cassiterite, gold, wolframite, cobalt and coltan from the Congo, plus the damage from huge pits and deep tunnels. The manufacture of gadgets is energy-hungry, too. Experts extrapolating data from one of the world’s largest dam projects suggest it takes 50,000 litres of water passing through a hydroelectric dam to smelt the aluminium for a single laptop. This means, they say, 3 square feet of rainforest is flooded per laptop.

As new aluminium equals energy use and environmental destruction, this raises the question: why can’t computers be made from recycled aluminium, given that this uses 95% less energy? And why can’t laptops and PCs be built for disassembly (where all the parts come apart to aid recycling)? Depressingly, some commentators think the tech stars are heading the other way, citing the MacBook Air as being extremely integrated. The harder it is to get at the components, the harder it is to recycle.

In addition, accounts have emerged recently of factories producing major brands that sound – with their dormitories and oppressive guards – similar to badly run prisons.

You could say we’re all enslaved by gadgets. Brands and consumers prioritise perfection over people (and planet). So ethi-tech (as I’m calling a hoped-for sustainable technological revolution) has yet to get going.

*Ethical Consumer* magazine carries ratings tables for laptops, tablets and phones, but remember that the world chucks away 20–50 m tonnes of e-waste a year. Is your computer really dead? Or do you just fancy a new one?

## Document 8

### **‘GLOBE study reveals legislators hold the key to tackling climate change’**

**Adapted from a news release by GLOBE, an organisation which supports national parliamentarians to develop and agree common legislative responses to the challenges posed by sustainable development, January 2013.**

On 14 January 2013 GLOBE International presented the 3rd edition of the Climate Legislation Study and formally launched the GLOBE Climate Legislation Initiative. The study, produced in partnership with LSE Grantham Research Institute, is a comprehensive audit of climate legislation.

Speakers, Presidents of Congresses and Senates and senior legislators from 33 countries attended this high level initiative, alongside United Nations Framework Convention on Climate Change (UNFCCC) Secretary Christiana Figueres, to launch a new process, the GLOBE Climate Legislation Initiative, which will support legislators to advance climate legislation between 2013 and 2015.

Top-line results of the new edition of the GLOBE Climate Legislation Study show:

- 32 of 33 major economies have progressed or are progressing significant climate and/or energy-related legislation.
- Whilst the approach often differs (whether directly inspired by climate change, energy efficiency, energy security or competitiveness), national legislation is achieving remarkably similar results – improved energy security, greater resource-efficiency and cleaner, lower carbon economic growth.
- Much of the substantive progress on legislative activity on climate change in 2012 took place in emerging economies, including China.
- While current national legislation does not yet, cumulatively, add up to what needs to be done to avoid dangerous climate change, it is putting in place the necessary mechanisms to measure, report and verify emissions, a pre-requisite for a credible global climate treaty.
- This progress will deliver real benefits to national economies and, ultimately, give world leaders the political space to go further and faster in the UN negotiations, helping provide a foundation for a comprehensive, global deal by 2015.

The Executive Secretary of the UNFCCC, Ms Christiana Figueres, said that:

“It is no exaggeration to say that the clean revolution we need is being carried forward by legislation. Domestic legislation is critical because it is the linchpin between action on the ground and the international agreement. At the national level, it is clear that when countries enact clean energy policies, investment follows. At the international level, it is equally clear that domestic legislation opens the political space for international agreements and facilitates overall ambition”.

GLOBE’s Secretary General Adam Matthews, said:

“We must be realistic. It will not be possible to reach an agreement in 2015 in the UN brokered climate negotiations unless the national regulatory frameworks are in place. It is by implementing national legislation that the political conditions for an international agreement will be created.”

## Document 9

### 'Why a global climate treaty remains worth fighting for'

**An article by Yvo de Boer in the *Guardian*, a UK newspaper, November 2012. Yvo de Boer is Special Global Adviser for KPMG and former executive secretary of the UN climate secretariat.**

Progress towards an international agreement on tackling climate change has been painfully slow, dogged by fundamental disagreements between the countries involved and exacerbated by the financial crisis. Little is expected of the upcoming COP 18 meeting in Doha – so is it time to abandon the idea of a climate treaty altogether? Why not give up and focus on national and regional efforts to tackle climate change?

After all, negotiating a global deal is a slow, frustrating business. Not only is climate science constantly evolving, but the 194 countries that will meet in Doha often have diametrically opposed interests and points of view. Blocking progress is ridiculously easy.

Many of the differences between countries revolve around the concept of historic responsibility. This is the idea that industrialised countries got rich on the back of emitting greenhouse gases so they should act first, and developing countries should be allowed to develop before being called upon to limit their own emissions.

The lack of commitment from much of the industrialised world to accept this burden has contributed to a certain obstructiveness among developing countries. The rich countries are not just reluctant to pay to tackle climate change in poorer countries – they are unwilling to commit resources at home as well. Pre-occupied by the financial crisis, most countries have not seen tackling climate change as something that is in their national interest.

Nonetheless, a global deal remains worth fighting for. Governments, businesses and civil society all have much to gain, for four key reasons.

The biggest benefit would be for the very national and regional efforts mentioned above. A global deal would bring a robustness and a consistency to climate policies in individual countries. The Montreal protocol tackling ozone-depleting chemicals, signed 25 years ago, is a case in point. While countries can make changes on their own, acting together can be much more effective.

A more consistent policy framework would bring a second benefit. With a legally binding global agreement in place, businesses and investors will know that the direction of travel is not going to change regardless of day-to-day events. Only then will they have the clarity and security they need to make the long-term technology investments that can tackle climate change. Making the wrong assumptions because long-term policies are unclear can lead to costly mistakes in the form of stranded assets, particularly in the field of energy.

Thirdly, a global agreement would create transparency, allowing the efforts of one country to be measured against another and helping to ensure that tackling climate change in one place does not simply move harmful activities to other countries.

Finally, it would also bring an element of standardisation so that all countries would know they are fighting the same battle under the same rules. It would also mean that compliance with these rules would be overseen by civil society groups that could hold parties to account and ensure that countries deliver on their obligations.

The impacts of climate change have started to become clearer in developing and developed countries alike. Many governments are starting to recognise that it is in their interests to act now, regardless of who is responsible for historic emissions and who is to pay for reducing future emissions. The increasing frequency and severity of extreme weather events like superstorm Sandy in the US is beginning to bring the issues into sharper focus for many.

And progress is being made. After the 2009 climate change talks in Copenhagen, countries responsible for more than 80% of global emissions developed targets to cut or limit the growth of their emissions. The ambitions for last year's meeting in Durban were low, yet it produced major achievements. These included kick-starting the \$100bn per year green climate fund and setting in train a second commitment period for the Kyoto protocol.

More importantly, though, the Durban meeting also started the international community down the road of all nations working together subject to one legally binding instrument to cut emissions. And crucially, this outcome was evidence of a new spirit of determination within the international community, with delegates refusing to close the conference until an agreement was signed.

But for the agreement to succeed, the benefits of green growth need to be clearer to everyone. Political consensus is important to building a strategy that will survive electoral changes, but the business community must also play a central role. The private sector is going to do most of the heavy lifting when it comes to green growth, so it is important that it makes the case effectively for low-carbon investments.

While it's important that all countries are committed to action to cut emissions and that those actions should be real, measurable and verifiable, it's also clear that many countries will need help from the international community to do so. That help should be subject to the same stringent accountability requirements as the emissions-cutting actions themselves. The best way to achieve this is through an international treaty – yet another reason that such a treaty is worth fighting for at Doha this year.





**BLANK PAGE**

---

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge International Examinations Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at [www.cie.org.uk](http://www.cie.org.uk) after the live examination series.

Cambridge International Examinations is part of the Cambridge Assessment Group. Cambridge Assessment is the brand name of University of Cambridge Local Examinations Syndicate (UCLES), which is itself a department of the University of Cambridge.