# Communicating Climate Change in



# A Global Narratives project









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Climate Outreach is Europe's leading specialist in climate change communication, bridging the gap between research and practice. Our charity is focused on building cross-societal acceptance of the need to tackle climate change. We have over 12 years of experience helping our partners find their climate voice - talking and thinking about climate change in ways that reflect their individual values, interests and ways of seeing the world. We work with a wide range of partners including central, regional and local governments, charities, business, faith organisations and youth groups.

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### Climate Action Network International (CAN-I)

The Climate Action Network (CAN) is a worldwide network of over 1200 NGOs working in more than 120 countries to promote government and individual action to limit human-induced climate change to ecologically sustainable levels. CAN members work to achieve this goal through information exchange and the coordinated development of an NGO strategy on international, regional, and national climate issues. CAN members place a high priority on both a healthy environment and development that "meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission). CAN's vision is to protect the atmosphere while allowing for sustainable and equitable development worldwide.

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### Climate Action Network South Asia (CANSA)

Climate Action Network South Asia (CANSA) is a coalition of over 160 civil society organisations from 8 South Asian countries. Its goal is to promote equity and sustainable development in the design and development of an effective global strategy to reduce greenhouse gas emissions, and ensure its implementation. With around 60 NGO members in India, the membership of CANSA ranges from organisations mobilising local communities to national organisations playing an influential role as technical partners with government agencies. Together the member organisations endeavor to promote solutions to bridge the gap between policies and practice among policy makers and civil society.

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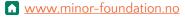
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These six CANSA members were the local partners for the project.







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### INTRODUCTION

### A new model of communications research

A large body of research shows that people need to understand climate change as a narrative\*, containing their own language and shaped by their own values and experience. Most climate change language however is dry, technical or too based in the campaign culture of the Global North. To date, there has been very little research into effective climate change communications for any Southern country.

This research is our first step towards redressing the balance. It finds the language around climate change and renewables that speaks best to the values and identity of people across India – a country chosen because of its critical importance in the world of climate change. It explores the attitudes of a wide range of people: urban professionals, remote farmers, people of progressive and conservative political values, and the young people who will determine the future of the country.

This research breaks new ground in three areas:

- Firstly, this is the **first qualitative research in India that tests and compares specific language around climate change and renewable energy.** We hope this is the start of a process of defining distinctly Indian narratives.
- Secondly, this study goes far beyond traditional focus groups and asks searching questions about people's values, identity and hopes for the future. This has added confidence and richness to all our findings.
- Finally, and most significantly, this work pilots a new model of cooperative design that avoids the
  high cost of professional research, by training national partners to conduct research themselves
  with their own audiences. This method invests in the skills and capacity of national level
  organisations and makes high quality research affordable in low-income countries.

This report is only a start. Our research cannot claim to represent the diversity of attitudes in this exceptionally large country. Nonetheless, we believe that it provides good foundations for further work and clear warnings that some familiar campaign language may not work well enough.

The success of this pilot project convinces us that this co-design approach can be shared across countries with fairly low level investment. Ultimately, our ambition is to roll out this programme internationally so that people in every country will come to understand that climate change is critically important to their own cultures and to their real lives, and take action.

For more on the Global Narratives project and how we plan to expand it beyond this pilot project in India, see the accompanying report: Global Narratives of climate change: a new approach to public engagement research.

<sup>\*</sup> Narratives are widely recognised as powerful tools of communication and the mechanism by which people create meaning. A basic definition of a narrative is: a simple story with recognisable actors that describe a problem, lay out its consequences and suggest (simple) solutions. Our Narrative Workshop methodology has been developed out of the recognition that both science and policy are represented in technical ways or in the form of exposition, whereas the natural form of public engagement is narrative. For more on our Narrative Workshop methodology, see Appendices 1, 2 and 3.

### The Global Narratives process

Global Narratives is a collaborative project with six key steps:

- 1. A **desk review** of existing research on the public's attitudes to climate change in the researched country carried out by Climate Outreach.
- 2. A **national coordinator** (in the case of the India pilot, CANSA) reaches out to its network and identifies organisations to be **local partners** (6 partners for the India research).
- 3. The local partners and the national coordinator attend a two-day **training workshop** facilitated by Climate Outreach where they identify their target audiences and receive training on how to recruit participants from these target audiences. They are also trained to facilitate a two-hour **Narrative Workshop** (Climate Outreach's method of social research that follows a standardised script to explore values, identity and attitudes). They work together to build test **narratives** (short blocks of text exploring different themes) to test in the Narrative Workshops.
- 4. The local partners then run **Narrative Workshops** with participants from their target audiences. They record the conversations and write them up in transcripts. The national coordinator has a key role in facilitating this process.
- 5. The local partners and national coordinator then meet again for a two-day **evaluation workshop** facilitated by Climate Outreach to share their transcripts and compare their findings.
- 6. A **recommendations report** is written in collaboration with the project partners by Climate Outreach and disseminated by the national partners to inform climate communications in their country.

For more on the methodology, see Appendices 1, 2 and 3.

Our Narrative Workshop methodology will be presented in the following forthcoming article: Shaw, C. and Corner, A. 'Using Narrative Workshops to socialise the climate debate: lessons from two case studies – centre-right audiences and the Scottish public.' *Energy Research & Social Science* (forthcoming).



The Global Narratives India project team at the training workshop in New Delhi, December 2016. Photo: CANSA

### **KEY FINDINGS**

#### Keep it local.

Highlight impacts and solutions that relate to the family, community, region and language group. Where possible, create core terms in local languages.

### Reflect national pride in India as a country that is overcoming challenges and on a journey of improvement.

Show that India can take action without waiting for other countries. Stress the national values of togetherness, diversity and self-reliance, and highlight distinctly Indian solutions.

#### ⇒ Focus on youth.

Present a positive and aspirational vision that will bring a better and healthier future for youth and people's children.

#### ⇒ Highlight the impacts of climate change on food and health.

Pay particular attention to regional and seasonal foods, and the well-being and mental health of farmers.

#### Present climate change as damaging our connection with nature.

Foreground the impacts on forests, other species and water supply.

### Show that changes need to come at all levels, which includes taking personal responsibility.

Present a narrative of cooperation between all sectors, including actions to reduce personal impacts as a way for people to perform a social duty or respect nature.

### Present climate change as a dramatic rift with the past that threatens natural and social harmony.

Highlight the shift in the monsoon and other weather patterns that are enshrined in cultural tradition. Present solutions as a means to restore that balance and harmony.

#### Use concern about pollution as the key entry point for starting the public conversation.

Be careful, though, to stress the distinct role of carbon pollution in causing climate change.

#### Present fossil fuels as polluting (rather than "dirty"), finite and imported.

By contrast, present renewable energy as clean, unlimited and a proof of Indian self-reliance.

#### Place renewables within a wider narrative of Indian natural abundance and diversity.

Highlight that they offer flexible options reflecting the cultural and geographic diversity of modern India.

#### Be wary of making grandiose claims about renewables.

Overcome scepticism by stressing that renewable technology is improving rapidly and becoming cheaper, more effective and reliable.

### INDIA COUNTRY PROFILE

### **Demographics**

The Republic of India is the world's second most populous country, with a population of 1.2 billion. India has the largest youth population in the world: 65% of its population is under the age of 35, and half the population is under the age of 25.1

India is very diverse culturally. Multilingualism is the norm, and most people speak two or three of the 23 official languages. In terms of religious faith, nearly 80% of people are Hindus, 14% are Muslims, and just over 2% are Christians, with many smaller faiths and sects (including Sikhism, Jainism, and Buddhism).

The cultural and geographical diversity of the country poses a challenge for climate communications, requiring that messaging be tailored to different local circumstances and cultures. To some degree, though, this is balanced by a strong sense of collective national identity – the product of 70 years of strategic nation–building by successive governments, originating in the struggles during and following independence. The Indian people have built a shared vision of an independent India founded on secularism and religious tolerance, self–reliance, and non–alignment.<sup>2</sup>

### **Economy**

India has one of the world's fastest-growing economies, with a sustained GDP growth of nearly 6% that has already lifted a third of the population out of absolute poverty. Major challenges remain: 20% of people live on less than US\$1.25 per day and there are great inequalities in life and health outcomes, especially between rural and urban areas.

### **Energy**

India is a large energy importer. It imports 70% of its oil and by 2025 will overtake Japan to become the world's third largest oil consumer behind the US and China. India's domestic coal, though plentiful, is low quality (and highly polluting) and needs to be mixed with higher grade coal for steel and electricity production. As a result, India imports one third of its coal consumption. India also imports one third of its natural gas and the government regards the expansion of gas production and use as an economic priority.

### Greenhouse gas emissions

Although it has historically been a low emitter, the rapid growth of the Indian economy makes the country – and the development choices it makes – of critical importance for the future outcomes of climate change. Its emissions of greenhouse gases have already risen by two thirds since 1990 and it is now the fourth largest emitter in the world. Without major policy intervention, emissions could grow by up to 85%.<sup>3</sup> Coal plants currently generate over 40% of its electricity and they have become the single leading cause of air pollution. One report estimates that the pollution from coal plants kills up to 115,000 people each year in India.<sup>4</sup>

### Government policy on climate change

The Indian government has recognised the importance of climate change. It has built carbon targets in its economic planning, managed through a dedicated Ministry of Environment, Forests, and Climate Change.

As its contribution to the 2016 Paris Agreement, India submitted an Intended Nationally Determined Contribution with the following elements to be achieved by 2030: reducing the emissions intensity (the relation between emissions and economic output) by 35%; increasing forest cover to absorb up to 3 gigatonnes of carbon dioxide, and increasing renewable energy to provide 40% of electric power capacity, delivered largely through a 'National Solar Mission'. In his Paris speech, Prime Minister Narendra Modi further committed to installing 175 GWatts of renewable generation within seven years. His speech, which exemplified the tone of the Indian government, spoke to the dominant role of the developed world in creating the climate change problem, and its responsibility to provide financial support to emerging economies and giving them "enough room to grow".<sup>5</sup>

# RECOMMENDATIONS: HOW TO TALK ABOUT CLIMATE CHANGE IN INDIA

The following recommendations are derived from the conversations and narrative testing in 16 Narrative Workshops containing 154 participants.

The numbers (example: 1) refer to the key findings that emerged from the Narrative Workshops and provide the evidence for each recommendation - these findings are detailed starting page 21.

A successful Indian narrative including these recommendations is provided pages 19-20.

### General principles

### Create a local story



India is a country of exceptional size and diversity where people's identity is most strongly related to family, community and village, and beyond that region and language group. Few people have the opportunity to travel far in India or beyond. Narratives about wider global impacts or remote places (for example ice melt at the North Pole) should be minimised. Instead focus on local impacts and local cultures, ideally communicated in local languages.

### Seek new language for core terms in local languages



The English terms climate change and global warming are adequate and understood by most English speakers. Although they can be translated directly from the English, there is an opportunity to create more engaging terms in regional languages. For example, the Hindi term *jalavaayu* parivartan (जलवायु परविर्तन) is not a direct translation of climate change but is a more expressive composite of words for water (*jai*) air (*vayu*) change (*parivartan*). Other core vocabulary such as *fossil fuels*, sustainability, renewables, adaptation, mitigation, emissions, and greenhouse gases could also be recreated in Indian languages in more creative and relevant ways.

#### Speak to national pride and specialness



All participants expressed a strong sense of Indian identity and national pride but aspired to being better. Some people strongly opposed assertions that India is the best country or overstatements of national strength. Narratives about climate change should be placed within this collective national context (for example, "here in India we...."; "Indian people do..."). Fossil fuels can be presented as being fundamentally un-Indian (imported, inflexible and simplistic) and the renewable solutions can be presented as fundamentally Indian (natural resources, flexible, diverse, creative – for example *Jugaad*, a form of innovation based on frugal and creative use of what is to hand<sup>6</sup>). Solutions can also be presented as a mirror that reflects modern India: the richness and diversity of its geography (from solar panels in deserts to dams in the mountains) and of modern Indian life (from small projects in villages, to rooftop panels in cities and solar farms to power industry).

### India's journey to become a better country



Participants said that India is "not perfect" but has done very well in overcoming its problems and is getting better all the time. Measures of progress include falling poverty, higher education and increased opportunities for women. They described this journey in moral terms (becoming "more special", cleaner, better, fairer) and rarely used the terms *progress* or *development*. Decarbonisation should be placed within this larger national journey towards a cleaner and better country, with the use of metaphors for journey (such as *path, crossroads, route, fork in the road*).

### Togetherness - strength through diversity



Despite the large national differences, participants identified togetherness and getting along as the key national strength. The concept of togetherness should be used in the context of adaptation ("together we will manage this problem") and solutions ("building on our wonderful diversity, together we will find creative new solutions").

# Nature - respect for nature, balance, connectedness and harmony



The word nature and the belief that we all have a connection to other living things came out as a core value in all the groups. It is revealing that, in his high profile speech to world leaders at the Paris climate negotiations, Prime Minister Modi emphasised this value: "we are guided by our ancient belief that people and planet are inseparable; that human well being and Nature are indivisible".<sup>5</sup>

The moral importance of respecting and protecting nature should be highlighted. Climate change should be described as damaging the balance and harmony of nature, and impacting forests, water and other living things. Solutions should be emphasised as coming from *natural* energy systems (wind, sun, and water).

# Balance - climate change upsets balance, and solutions restore that balance



Conversations frequently referred to climate change as a threat to both natural and social balance/ harmony. Causes of climate change should be presented as unbalanced and destructive, and solutions should be presented as balanced and creating social harmony through togetherness.

### Faith - develop and apply explicitly faith based narratives



Across all groups – rural and urban, young and old – people expressed the centrality of faith in their lives. Many of the values mentioned above (such as interconnectedness and respect for natural harmony) are grounded in faith principles. There is immense potential for working with faith leaders and networks to develop distinctive faith–based language around climate change, especially for rural and conservative audiences. To date, very little work has been conducted with faith groups, especially Hindus.

### Power - focus on its misuse (rather than its origins)

2

People were reluctant to directly blame government, companies or elite groups for social or environmental problems. Instead they described the problems as a misuse of their power. This is a subtle but important distinction for campaigners who tend to demonise root causes (such as governments, big business, fossil fuels, cars, oil companies). Therefore communications should challenge the exact ways by which the targets misuse power – for example governments that do not 'do their job', cars and technologies that pollute, oil companies that block change.

# Health - make health messages central in both impacts and solutions



Health was also a constant point of concern in our groups and in wider polling. The causes and impacts of climate change that relate to health should be highlighted: for example pollution from fossil fuels, vehicles and power plants, as well as heat stroke and diseases from water quality. People were particularly concerned about the increases of mosquito-borne diseases such as Dengue Fever and the connection should be better established and made widely known. Climate change also affects mental health and brings distress, unhappiness, and depression. By contrast, the solutions to climate change will bring a healthy, clean future, and taking action can bring optimism and a positive outlook.

# Present climate change as a threat to children and their health





All groups expressed concern about the health and wellbeing of children and responded well to narratives about caring for future generations. A national survey found that the phrase "a better future for your children" would motivate the large majority of people to take action on climate change.<sup>7</sup> Renewables should be presented as an opportunity for a cleaner, healthier and more prosperous life.

# Promote personal action within the moral language of responsibility, respect and duty







Participants believed, as a core value, that we are defined through our deeds. In all groups, people accepted the role of personal behaviour in climate change and no one adopted the avoidance strategy – common in other cultures – of blaming other people or countries for climate change. Communications should describe reducing energy use and emissions as a way towards personal evolution for the better, as well as demonstrate that others at all levels are also taking action to enhance a sense of togetherness and shared purpose.

### Use keywords that reflect values and identity



Keywords (sometimes called "frames" by communicators) contain wider meanings that embody people's values and identity. People use them often with their social peers and when they hear them in a message, they understand that it is relevant to them and to their view of the world. The following keywords appeared spontaneously throughout the Narrative Workshop conversations and should therefore be considered for use in all messaging:

Respect, Freedom, Nature, Balance, Harmony, Fairness, Power (and its misuse), Clean, Duty, Responsibility.

### Aspire to a better and more prosperous life



All groups preferred positive and aspirational language of a better and more prosperous life. No one specifically mentioned a desire to be rich but most aspired to the lifestyle options that come with greater wealth, such as travel and cars. A wider national values survey<sup>7</sup> confirmed the central importance of financial aspiration, especially with lower income groups.

# How to talk about the causes of climate change

### Here, now, dangerous and a fact





People already have a strong awareness that the weather is changing and poses a growing long term threat. In all groups people spontaneously expressed concern about the changing weather before they were asked any questions about climate change, showing a high level of existing consciousness. (In contrast, research in developed countries shows that most people do not mention the changing climate as a major concern until specifically asked about it). Therefore, present climate change as a non-disputed reality.

### Provide more information







In national surveys<sup>8</sup> only one third of people said they were informed. An earlier survey found in the poorer states that only 20% understood the meaning of climate change.<sup>7</sup> In all the groups, people showed a strong desire to learn more about the problem and its causes. Argue that Indians have a <u>right</u> to good information and that the government has a responsibility to inform them.

# Make pollution a central part of messaging, but focus on carbon pollution







People are deeply concerned about air pollution and regard it to be the leading cause of climate change. They understand that solar power, renewable energy and electric cars are clean and don't produce pollution. Pollution, and its connection to health and children, is a powerful way to mobilise action against fossil fuels.

However, a warning. People are confused about this relationship and often wrongly associate climate change with *all* sources of visible air pollution, including burning plastics and firecrackers during Diwali. Government policies could significantly reduce unhealthy air pollution with little effect on the greenhouse gases that cause climate change – for example by forbidding open fires or installing scrubbers on coal fired power stations and incinerator chimneys. The Modi government is already a strong advocate of natural gas as a "clean fuel" and the consumption of LPG (Liquid Petroleum Gas) in homes and vehicles is increasing by 10% a year, making India the second largest consumer in the world. A focus on "polluting" energy could promote this shift to natural gas rather than renewables.

Therefore avoid the simple formula "pollution EQUALS climate change" and talk about "pollution PLUS climate change". Explain the connections whenever possible and be clear that climate change is caused by one form of *carbon* pollution.

# Highlight the threat to forests and the need to protect them - but be careful



All groups, especially in rural areas, saw deforestation as a leading cause of climate change. Globally speaking this association is absolutely right: deforestation is the second largest source of human emissions. In India, though, deforestation is a minor source of emissions that is largely balanced by reforestation<sup>10</sup> and enormously outweighed by the amounts of carbon dioxide removed by standing forests.<sup>11</sup>

It is still worth communicating around forests, stressing that protecting forests is essential for minimising both climate change and flooding, and creating greater awareness that climate change will have a major impact on forests leading to increased droughts, fires and diseases. However communications around forests must not distract people's attention from the main sources of Indian emissions: electricity generation, transport, cement production and heavy industry (in that order).

### How to talk about the impacts of climate change

New, abnormal, exceptional, weird and a major break with the past



Although science talks about climate change as intensifying existing extremes, participants – even young people with limited personal experience – perceived climate change as a dramatic and distinct shift. They did not accept the trial narrative that India "has always had extreme weather events but climate change is making the chances much higher".

### Focus on local and regional impacts (not global impacts)



People's perceptions of impacts are very localised. Therefore concentrate on local impacts that are most relevant for your specific audience. When talking about national impacts, foreground the shifting monsoon, droughts, floods and sea level rise (especially the impacts on Mumbai and Chennai). Give limited attention to distant international impacts, and use them to show that this is a global problem requiring global solutions.

# Make the disruption of the monsoon and its timing central in communicating impacts



The shifting timetable of the monsoon is one of people's greatest concerns, and is also the strongest metaphor for a climate that is becoming unpredictable and abnormal. People viewed the phrase "coming at the wrong time" as too weak, so seek powerful words for disruption.

# The disruption of the cultural and religious calendar is the evidence of severe imbalance



Indian culture and faith traditions have very strong connections to weather patterns embodied in language, stories and festivals. One of the key ways by which people notice and measure the shift in climate is in relation to these cultural benchmarks, and the dates of festivals. These are also a key way to initiate and maintain a public conversation: for example when there is no wind for a kite festival, the harvest is too early for a harvest festival, or a fruit, vegetable, flower or bird associated with a particular event is not available.

# Stress the impacts on food and agriculture and tell the personal stories of farmers



Food was a constant theme in the discussions about identity and national pride. All groups expressed concern about the impacts of climate change on the quality, quantity and cost of food. All groups, even those in urban areas, were concerned about the welfare of farmers, increasing farmer suicides, and climate-related migration.

### How to talk about renewables



Solar engineering trainer from Barefoot College, India. Photo: <u>UN Women/Gaganiit Singh</u>

### Use the keywords clean, non-polluting and unlimited

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Participants expressed much concern about pollution. When talking about fossil fuels, their main concerns were that they would run out. Present renewables in direct response as clean, non polluting, not producing smoke or waste, unlimited and using national resources. Climate change need not be the leading argument, but should always be mentioned too.

### Present renewables as 'natural' energy, within a narrative of Indian abundance





People objected strongly to the importation of fossil fuels. By contrast, renewables should be presented as a national resource. In testing all groups strongly approved the following narrative: "India has always been blessed with natural resources: the water, wind, forests and sun that can supply our energy needs far into the future".

Weave this diversity of options into the larger narrative of cultural and geographic diversity (a source of national pride) such that renewables are seen to be the best solution for the diverse, modern India (from village to industry to school to hospital to urban condominium to solar or wind farm).

# Stress that there is a diverse and flexible range of renewable technologies





People's understanding of renewables is based strongly on their own experience and what they see around them. Unless they are close to a hydro dam or wind farm, they tend to think entirely about solar PV which leads them to see renewables as limited (only when the sun shines) or unreliable (if they have poor experience of solar technology) or unrealistically small scale. No one in the groups mentioned large scale solar farms.

Communications should therefore avoid promoting any single model and should present all renewables as highly adaptable and varied, meeting all different needs (in contrast to the old systems of centralised power stations) and reflecting India's cultural and geographical diversity.

### Show evidence that renewables are dramatically improving





Renewables struggle to overcome a bad reputation from the earlier years of development. The main criticism of renewables is that they are unreliable and only supply energy "when the sun shines". People need to understand that renewables, like all emerging technologies, are improving very fast in terms of their reliability, affordability, efficiency and storage. People liked narratives that talked about how solar balances supply and demand, for example: "solar power provides power when we most need it: at the peak of the hot season, when our grid supply most often fails".

# Present renewables as import replacement and Indian self-reliance



Most groups mentioned the cost of energy imports as a concern and the replacement of energy imports as the primary economic advantage of renewables. Effective language will not stress India's dependency on imports but will present the positive argument that India has abundant natural energy, can replace expensive imports by using its own resources and be self-sufficient in energy.

# People are not yet sufficiently persuaded to accept 100% renewables





We tested the following narrative promoting the shift to 100% renewables: "Many people around the world are now talking about moving to 100% renewable power and moving out of fossil fuels altogether. Surely we can have a future where all our power comes from clean renewable power?" This narrative performed poorly, with several people rejecting it and most people ignoring it altogether.

The main obstacle appears to be that renewables have not yet been accepted as a viable large scale energy supply and there is still widespread scepticism, often based on outdated experience, about their viability. Secondly, people do not fully understand or accept the role of coal and fossil fuel powered energy in climate change. It is likely that Indians need more positive experience with renewables before they will accept the vision of 100% renewable power. Until then the case will need to be made carefully and supported with clear evidence that renewables can function at scale.

### How to talk with young people

India has the largest youth population in the world, and 65% of the population is under the age of 35. Our research focused strongly on people in this category. We spoke with 132 people under the age of 35, by far the largest demographic in this research programme. They were predominantly college students and from middle class backgrounds, although there was a group with students from disadvantaged backgrounds. A third of the participants in the rural groups were under 30 years old.

Young people expressed joy and excitement in being "carefree" and young and enjoyed their choices and freedoms. In a wider sense they associated this with their pride in India as a free and democratic country where they have a freedom to, as an Arts student from Delhi said, "voice our opinion ... not just about the government but any authoritative body, we all have the right to question them but we forget to exercise that". In their values they consistently expressed strong respect towards their parents and older people, a love for nature and the need to be humble, non-judgmental, tolerant, open and honest.

Compared with similar research with young people in Britain<sup>12</sup>, Indians are far more optimistic about the future and engaged with climate change. They accepted the reality of climate change and saw it as a threat for their future. They strongly favoured narratives that presented a positive message of progress and were more inclined than older participants to accept messages around the new jobs that could be generated through decarbonisation. Young people spoke more positively about renewables than older participants who had more negative personal experiences. However, as a group young people showed no greater interest in narratives about 100% renewables than older participants.



Commerce students from Ahmedabad participating in a Narrative Workshop facilitated by local partner Centre for Environment Education (CEE). Photo: CEE

# Language to test further, use carefully or avoid

Avoid directly blaming people or institutions unless they are misusing their power



People were reluctant to judge or criticise other groups or institutions. They firmly rejected a test narrative that blamed "energy and oil companies [that] can make huge profits from destroying our air/climate/environment" or "rich people [who] use the most energy". The core values of open-mindedness and respect led them to reject narratives that blamed any single target unless it could be shown to be misusing its power.

Be careful with language around inequality and justice; talk instead about fairness



Although many people spoke about poverty, very few spoke about inequality and none were prepared to blame specific groups or institutions for creating poverty. People felt a strong empathy with people affected by climate change and talked about "fairness" but did not use the word 'justice' once. This suggests that the common campaign call for "climate justice" may need different language.

Avoid exceptionalism - do not call India the best country or the world leader



People are proud of being Indian but aspire to being better. Some people strongly opposed assertions that India is the <u>best</u> country or overstatements of national strength. They liked the idea of Indian leadership when it was leading the Global South but were sceptical that it could lead the entire world. It is better to show leadership around specific example (for example the world's largest solar farm).

Do not assume that people automatically and uncritically support new technologies



Environmental communications often seek to promote new technologies (for example electric cars) in an exciting narrative of progress and aspiration. In reality, though, people expressed very mixed feelings about technology. They enjoyed the benefits of communications and increased mobility, yet were also concerned about the costs and erosion of culture. Many felt that children have been damaged by new technology and lost their innocence. These concerns were also expressed by engineering students and urban professionals – groups that might be assumed to have a positive attitude towards modern technologies. Therefore, always explain the benefits a technology will bring and show how it meets existing needs and reinforces values.

Do not push the message that the rich world must take climate action first



The Indian government always argues in climate negotiations that the rich North must fund the poorer South. Most participants agreed that developed countries had greater responsibility but disliked the demand that "the developed world should provide funds and technology to India". They saw this as a challenge to national pride and far prefered the sentence: "we cannot wait for help to arrive from the West; India is in the unique position to be the first emerging economy to take action." National polling confirms this finding: only 18% say it should make its emissions reductions conditional on action by rich countries.<sup>8</sup>

# Avoid mention of specific parties or politicians unless speaking to an audience that is known to support them



Politics were listed by several people amongst their strongest dislikes. "Politically, we have the worst country in the world" said one of the Delhi students. Opinions on the current BJP (Bharatiya Janata Party) government are especially polarised and a test narrative that "Prime Minister Modi has pledged \$50 billion in investment for solar panels on rooftops" received equal numbers of negative and positive responses.

### Avoid technical and environmentalist language

Across the narratives, people did not understand many of the terms often used by campaigners and civil society organisations. The term *resilient*, which is often used by climate specialists, was confused with *resistant*. Even basic words such as *development* and *environment* were used very little in the group conversations. Environmentalists tend to take a global perspective and use language that removes climate change from people's immediate and local concerns – referencing polar bears, ice caps and 'saving the planet'. Language taken directly from Western campaigning can be misunderstood: for example the phrase "save the earth" often translates as "save the ground" rather than "save the planet". It is far better to listen carefully to the language used by people in your target audience and incorporate it into your messaging.

### Be careful using the word 'dirty' - use 'pollution' instead



The word *dirty* is commonly used in climate narratives to criticise fossil fuels. When we tested narratives containing the word – for example "pollution from burning coal is *dirtying* our air" or "with renewable energy we can close the *dirty* electricity power plants fired with coal" – responses were surprisingly polarised. People either strongly liked or strongly disliked it. In several cases they repeatedly circled it with red ink (conveying dislike), pointed to it with arrows or wrote DIRTY in capitals over the top. The intensity of this reaction (and the strong cultural meaning of dirt in India<sup>13</sup>) suggests that this word may have complex meanings and must be used with caution and carefully tested. The word *clean* had no such reaction and can be used.

### Don't assume that people accept the problems with coal or its connection to pollution



Despite years of awareness raising, there is still little interest in coal or understanding of its role in generating pollution and climate change. Narratives that mentioned coal were ignored or disliked. People may have a strong response to coal if they live close to a coal fired plant or coal mine, but it cannot be assumed that people will automatically make the connection between coal and pollution or climate change. Therefore, rather than leading with messaging against coal, it may be better to lead with a general pollution narrative, which will be widely accepted, and include coal as a primary cause of that pollution.

# Recognise that some groups are more vulnerable and will be worse affected



People accept the language that "we are all connected to the natural world and each other" but they rejected the line from one of the test narratives that "climate change affects everyone," arguing that the rich will be able to defend themselves and it will be the poor who are most affected. This should be incorporated into a narrative around fairness and our duty not to harm those who are most vulnerable.

# Be careful with the word 'access' - talk more about sharing and distributing



Although campaigners use the term "energy access" to promote renewables, people did not understand this term and many described renewables as being "inaccessible" because they are hard to source, purchase and install. It is better to use the argument that decentralised renewables could *share* and *distribute* power across the country.

# Avoid overstatement and grandiose claims about the economic potential of renewables



When asked about the positive arguments for renewables, nobody in any of the groups mentioned the economic potential of renewables for jobs or growth. When presented with narratives about jobs (for example, "solar power alone will provide 1 million new green jobs"), students liked the language but older people were more sceptical. Narratives around the potential for jobs and economic opportunity should work well (these are major concerns) but need to be supported with concrete examples and evidence. In essence the strategy should be 'show not tell'.



Farmers participating in a Narrative Workshop in Ambabai Village (Jhansi) facilitated by local partner Development Alternatives (DA). Photo: DA

### WHAT A SUCCESSFUL INDIAN NARRATIVE LOOKS LIKE

We tested eight narratives in detail (given in Appendix 3). Participants marked the parts they liked and disliked in different coloured pens and discussed their reasoning in group discussions (see Appendix 1 for more on our Narrative Workshop methodology).

By far the most popular narrative, across all groups, used a moral framing around responsibility and cooperation. It describes the natural world as a "precious gift" that we are connected to. It says we have a responsibility to reduce our own impacts, and we need to all "pull together and play our part". It says India is in a strong position to take action on its own and "choose the right path".

Two other narratives were strongly and consistently supported. One explored the themes of *independence*: independence from expensive fuel imports and energy companies, generating energy from unlimited Indian natural resources. The other explored positive arguments for renewables based around economic *opportunity* and *modernity*.

Below, in blue, we have combined the most effective language from the test narratives. We have added some additional language that emerged from the conversations during the Narrative Workshops, marked in orange. The language below should be effective across multiple Indian contexts and audiences.

Climate change is imbalance

The natural world is a precious gift. We are all connected to the natural world, to the water and to the air. And we are connected to each other. Yet now the weather is out of balance. Seasons are coming at the wrong times. The monsoon is changing and coming at the wrong times. It can hail in June. It is not how things are supposed to be. We need to take action to restore the natural balance.

Caused by pollution...

Burning coal oil and gas in our cars, homes and power stations is polluting our air, our water and now changing our weather. Pollution is damaging our health, especially the health of the old, sick and children. And carbon pollution is changing our very climate. For all these reasons it is time to move to clean natural renewable energy- solar and wind.

...and by disrespect and misuse of power

And this imbalance is happening because we are not respecting nature and each other. Modern technologies provide many opportunities but we are misusing them and the power they give us.

Fairness

Taking action on climate change is a matter of fairness. It is not fair that the richest people use the most energy but the poorest people will be worst affected by climate change.

Together

We all need to pull together to play our parts. Governments, businesses, farmers and communities all need to make their contribution. And we as individuals all have a responsibility to reduce our emissions and show our moral values and respect through our actions. Working together we can stop climate change.

Energy self-reliant

India imports oil, coal and gas that are expensive and running out. But there is a better way.

With renewable energy we can be energy self-reliant, running off our own resources. Renewable energy is unlimited because it comes from the sun, wind and rivers. It can never run out. India has always been blessed with natural resources: the water, wind, forests and sun that can supply our energy needs far into the future.

# A mirror of modern day India

With renewable energy the Indian public will no longer be dependent on the centralised power companies with their huge polluting power plants. These technologies were designed for different countries in a different century. Now energy production can be distributed around the country, sharing the income from power generation across the whole country, not just handing it to the big energy companies and their foreign fuel suppliers. Investing in clean energy means investing in our own communities and taking charge of our own energy – creating local jobs and stronger communities, and a more stable climate.

India is a diverse country and needs diverse, flexible and modern solutions that meet Indian needs. Renewable energy comes in many forms that can match the variety of modern day India – from solar panels in villages, to solar electricity and hot water panels on the roofs in our cities to large dams, wind and solar farms supplying our industry.

### Flexible and fair

Renewables provide a flexible solution that shares the income from power generation across the whole country, not just handing it to the big energy companies and the suppliers of imported fuels.

Renewable power systems can provide the power people need, right now, directly in their villages. Investing in clean energy means investing in our own communities and taking charge of our own energy: – creating local jobs and stronger communities, and a more stable climate.

# Energy when we want and need it

Renewables are also far better at meeting our energy demands. The peak of the hot season, when we most need fans and air conditioning, is when solar panels are working the best- and when our old energy system most regularly breaks down!

# And getting better all the time

Renewable energy is changing very fast, becoming far more reliable, efficient and cheaper. New technologies in large scale energy storage can match supply to demand far better than the old system, providing power when we most need it.

# Moment of choice on a journey

India is on a journey to become a better, cleaner and more developed country. We now stand at the crossroads and we need to choose: do we continue with dirty fossil fuels or choose the path to clean renewables? Our responsibility is to make the wise choice and choose the healthy path for our children and a cleaner world for them to raise children of their own.

Fossil fuels are on the way out. It is inevitable. The national government is now cancelling plans for new coal power plants and says that nearly half of all our electricity will come from renewable power within 15 years.

In India our responsibility is to make wise choices and choose the path of least pollution while meeting the needs of our people. We cannot wait for help to arrive from the West. India is in the unique position to lead the way and be the first emerging economy to truly take action.

# ANALYSIS: WHAT PEOPLE SAID IN THE NARRATIVE WORKSHOPS

The 16 Narrative Workshops all followed the same structure: starting with values and identity, moving to concerns about the future, and then exploring attitudes to climate change and renewables (see Appendix 1).

This section follows the same structure, reporting the key findings that emerged from the Narrative Workshops and that provide the evidence for the recommendations above. Alongside the findings are circled numbers (example: 1) which can also be found next to the recommendations they support in the section above.

Following each quote from a participant, a letter (example: A) indicates which Narrative Workshop the participant attended. The details of the 16 different Narrative Workshops are provided in Appendix 2.

### What are people's core values?

In the first part of the Narrative Workshops, we asked people about their values and identity: what they liked/disliked, their core values, and what made them proud and different from other groups. Their answers provide a template for how best to talk with them, and what to avoid saying. The words they used to describe themselves provide keywords for shaping climate communications.



### Openness/tolerance/not judging others

All groups stated the need for open-mindedness. The rural Narrative Workshop in Chamba stressed that the most important personal values were to listen, understand and reciprocate: as one woman said, "our teachings and advice are meaningless unless we understand the other person's point of view and respond to that" **P**. Another added "a good person… sees good in other people. If a bad person is there, a good guy should be able to see his good qualities and celebrate them and … accept him as he is" **P**.

All groups were wary of narratives that blamed others for misfortune. One participant quoted a parable on the ineffectiveness of wider action: "A man set out to change the world. He was unsuccessful, then he set out to change his family and in the end he realised all he can do is to change himself" D.



A group of mostly farmers participating in a Narrative Workshop in Orccha facilitated by local partner Development Alternatives (DA). Photo: DA

2

### Opposition to the misuse of power

Participants were unwilling to directly challenge power or the systems that maintained it and preferred to criticise the misuse of power. A professional woman in Delhi said: "the country is good but there is misuse of power" J. A student stated: "The worst thing nowadays is, people are just misusing their powers. Like, if a man is more powerful he just misuses the power against the poor man" B. Rural and disadvantaged groups were more inclined to talk about poverty than middle class and urban groups, but still rejected language that blamed institutions or social systems.

This tendency to focus on misuse was also applied to fuels and energy. One Ahmedabad student said, emphatically: "it is not 'unfair' to generate and use energy. How the energy is being generated and transmitted is what matters" **E**. Another said "technologies are never dirty: it's the motive or intention that we use" **C**.

3

### Religion and moral principles

Religious identity was very strong across all groups even among the more secular students: "my values are being a proud Indian and respecting our religion" **A**. All groups referred to a deep moral code. Farmers stated that what made the group different from other groups was that they "they do not do wrong things" **H**.

This moral code is defined by deeds and action: "The deed is the most important thing. With good deeds the good religion can be followed. There is no point being vocal about being Indian or Hindu, if you think and act differently" **P**.

4

#### Respect

Respect was repeatedly mentioned in all conversations. "Respect for me: it's all about respect and...accepting. Whatever I am they should respect me and I also should respect myself" B. When discussing their core values, Vocational Studies students mentioned respect thirteen times in a few minutes, including respect for nature, environment, young people, old people, other people's emotions, elders, tradition, respect for all living things, plants, and animals A.

5

#### Nature

Caring for and respecting nature was a core value in all groups. Nature was primarily defined as forests and water, though people also spoke about wild animals. Spending time in nature is an aspiration for many Indians – a BBC survey with low income urban groups found that only 5% "spent time in nature." Rural participants were concerned about their own impacts on the natural environment, and said that "not polluting the environment" and "not using chemical fertiliser" were among their core values **G**, **H**, **P**. They were more inclined than those in cities to talk about their religious duty to care for nature: as a farmer in Uttar Pradesh said, "Humans are part of nature, we should do something good for nature" (Manushya prakriti ke anga hein, prakriti ke liye kuch kare) **H**.

6

#### Positivity

Positivity was a core value for all students and was strongly associated with open-mindedness and not having prejudices: "I like a positive attitude, optimism because most people are pessimist, sceptical about anything; most of the time I believe that if people look at things positively then they can always get through, there is no point being negative" **B**.

### Intergenerational care

There was a strong sense of intergenerational responsibility. Those with children mentioned caring for them and providing for them as their dominant value. All groups listed respect for elders as a major value. Students were not yet thinking about their own children but consistently expressed respect for their parents. The core values of farmers included "securing a better future for our children" and "acquiring knowledge from our elders and helping the next generation" H.

#### Proud to be a woman

Several groups spoke positively about the increasing opportunities available to women. In urban groups women were very enthusiastic about their new opportunities: "As a young woman, I feel I am happy to be born in this era where I can do what I like, dress the way I want, talk openly and live a free life" K.



Participants of a Narrative Workshop in Chamba facilitated, in Hindi, by local partner Integrated Sustainable Energy and Ecological Development Association (INSEDA). Photo: INSEDA

### What do people think about their Indian identity?

All participants were invited to explore their attitudes to their national identity: what makes them proud to be Indian and whether they think that India is better than other countries. The aim was to find any common identity, or source of pride, around which India could build distinctive national climate change narratives.



### People are proud of being Indian

All participants, across the range or politics and age, said they were "proud" of India. Many said that being Indian was a major definition of their identity, alongside faith and occupation: "you can take a person out of India but you cannot take India out of that person" **B**. For religious Hindus, national pride was strongly related to their faith: "I'm proud of India as it is the birthplace of Ram and Krishna" **H**.

10

#### Strength in diversity

People described their greatest source of pride was India's diversity and tolerance. The national anthem, *Jana Gana Mana*, focuses on cultural and geographical diversity.\* Participants often spoke about this: "Geographically I am very proud of being an Indian - we have rainforests, we have deserts, we have mountains, we have grasslands" B.

When asked what India represented, the dominant associations were diversity, co-operation, harmony and togetherness. "Indian people give respect to all the religions equally. It is the only democracy where all people live in harmony" **G**. The national narrative of improvement was also based on togetherness: "We are on the path to progress and we will surely reach the top if you and I, all of us, together, can do something for our country" **P**.



Workers carrying sand filled geo bags to be pitched on the banks of the river Brahmaputra in Gumi village, Guwahati as part of the Assam Integrated Flood and Riverbank Erosion Risk Management Investment Program. Photo: Rakesh Sahai for ADB

<sup>\* &</sup>quot;Rouse the heart of the Punjab, Sindh, Gujarat, Maratha, Dravida, Odisha and Bengal. It echoes in the hills of Vindhyas and Himalayas, mingles in the music of the Yamuna and the Ganga and is chanted by the waves of the Indian Sea."

### Independence and freedom

Participants expressed pride in India's struggle to achieve and maintain self determination and a secular democracy: "It's just 65 years that we have been able to perform without being instructed or dominated so how we have performed is applaudable; India is more democratic than other countries" A. "India is the only democracy where all people live in harmony" G. "I have freedom of speech, I can move around and settle wherever I like, I am born in a democracy. It's great!" M.

12

#### Politics is divisive

People liked living in a democracy but didn't necessarily like what it delivered. One student said, "Politically, we have the worst country in the world" D. Politics are especially divided under the ruling Bharatiya Janata Party (BJP) government. Some audiences clearly supported the BJP, and a farmer used their campaign slogan "India will shine" in relation to renewables H. Yet a test narrative that gave positive mention to Prime Minister Modi had very polarised responses of both strong approval and strong disapproval.

### India has come a long way (but has some way to go)

All of the groups accepted that India has flaws but is consistently getting better. "Even though we have differences, we're still trying to overcome them and live together" A. "India is not yet a special country but I want to make it special" B. "I am proud of the fact that India has come a long way despite the struggle and exploitation in the past, before independence. Now we are exploring new ideas, trying new methods and systems for improving our facilities" J.

People refused to state that India is "better" than other countries and were wary of making comparisons: "I won't say India is a perfect country but I can say that it can do better as it is a developing country and it will take time to develop" A.

People were reluctant to criticise India. The only participants to mention poverty were in the group of students recruited from lower income backgrounds (O) and they referred to it as a challenge not a criticism, contained within the dominant narrative of progress that India had come a long way and would continue to improve.

No group, even those in rural areas, discussed a traditional way of life in their definition of India. Although the national father Mahatma Gandhi extolled traditional village life and handicrafts, there was little appetite for them in the groups.

### What do people think is going to change in the future?

We invited participants to share their concerns about the future, the changes they have noticed in their lifetime and whether they think things will get better or worse. From this we could judge how strongly people gave priority to climate change over other issues and whether their general attitude was optimistic or pessimistic.

14

### Many people spoke about a loss of environmental balance

In all conversations people spoke of environmental decay: "People have lost the connection with nature"  $\mathbf{K}$ ; "There is a disturbance in nature, there is no balance anymore... that's why we have so many natural calamities"  $\mathbf{I}$ ; "the nature, it's just disturbed, the balance is gone... nothing is like what it used to be"  $\mathbf{N}$ .

15

# Climate change was strongly present as a topic in all conversations about change

Only three of the groups had been given any indication that climate change was the overall topic. There was no mention of climate change in any workshops before this point. Despite this, all groups strongly mentioned observable changes in weather patterns – and sometimes the specific term "climate change" – as a major negative change. All groups were clear that this was not just a future problem but already having a major impact. This is markedly different to national research conducted 15 years earlier in India which reported that climate change was "only discussed as a concern after people were prompted."<sup>7</sup>

16

# However, no one mentioned climate change as a problem they would like to tackle

The main issues people wished to tackle related to specific local problems including pollution, waste and crime. The failure to include climate change may show a lack of personal or collective power.

17

#### Negative changes outnumbered positive changes

People mentioned positive changes in India in terms of reduced poverty, improved mobility and increased opportunities for women. However negative changes around climate change, population growth, waste and terrorism dominated people's views of the future. Most participants who expressed an opinion about the future felt that things were likely to get worse: "my grand parents keep saying that the world was so much better" I. "mostly I think negative side is dominating" **D** and young people felt a responsibility to respond "this is the last generation which has a chance... we're too late already and we would lose this chance by the time the next generation takes over" I.

18

### People have ambivalent attitudes to technology

People had mixed feelings about computers and telecommunications, and most groups expressed the concern that these might harm children. A trial narrative comparing the expansion of solar power to the expansion of mobile phones performed poorly, against prior expectations.

19

#### Climate change was not mentioned as an intergenerational concern

When people were asked about concerns for their children, their primary concerns were about the loss of innocence, the lack of outdoor play and the impact new technologies might have. Climate change was not mentioned in this context.



Children on their way to school. Photo: Ondrej

### What do people think causes climate change?

We invited participants to explain what the term "climate change" meant to them personally and what they thought was causing it. In particular we wanted to know if they understood the role of fossil fuels and personal behaviour.



Changes in climate change are real, dangerous, happening now and caused by us

Every group talked, unprompted, about the changes in the weather as real and growing. Most understood the term "climate change" though some were unclear about its exact meaning. An earlier national survey found that Indian public understanding is poorer than in other Asian countries.<sup>7</sup>

The perception of climate change as a current threat was especially high: "Climate change is a global issue... we see so many natural calamities now-a-days... the effects will only get worse... climate change is a threat to human life, and a result of human activity" L. In wider polling Indians consistently place climate change as the most serious national threat above terrorism, border conflicts and economic instability.<sup>14,15</sup>

When asked whether climate change was a natural variation, every group asserted strongly that it was caused by humans. Other national surveys have also found that the majority accepts human responsibility. The Indian national partners reported that ten years ago farmers were more likely to talk about the changes as a natural fluctuation and that there had been a significant change in attitudes. In three urban groups people criticised President Trump for his scepticism about climate change.



People's understanding of the causes of climate change are superficial and under-informed

Climate change is a complex phenomenon with a chain of causes and effects. There are therefore many valid ways to explain the causes of climate change: gases (carbon dioxide and greenhouse gases); fossil fuels (especially coal and oil); specific industries (electricity generation, heavy industry, cement production); specific uses of energy (transport, air conditioning); land use (deforestation, intensive agriculture, meat production); lifestyle (consumption, mobility). Participants, including those with a college education, showed a limited understanding of these causes, many of which were not mentioned in any of the Narrative Workshops. They also confused climate change with ozone depletion – a different issue though with some related causes.



People believe that the two primary causes of climate change are pollution and deforestation

In all urban groups, pollution was proposed as the main cause of climate change followed by deforestation. Rural groups believed it was caused by deforestation and the use of artificial fertilizers (which they described as a form of pollution).

The association with pollution led them to wrongly assume that all forms of pollution caused climate change, including industrial waste, radioactive waste and pesticides. They also focused on visible forms of waste: "when we use more plastic and dispose of it, it just gets cluttered on the surface of the earth and it makes you know when we burn it or try to dispose of it and it causes carbon emissions" D. In the New Delhi groups, conversations often moved rapidly to complaints about the air pollution from the use of crackers during the Diwali festival, litter and even the practise of spitting out paan (chewed betel nut).

26

People connected deforestation and climate change, possibly through an intuitive perception that both involve a destabilisation of nature and water cycles. However they did not understand the actual mechanisms by which burning or clearing forests release the greenhouse gases that lead to climate change. Nor did they understand that climate change will damage forests though droughts, forest fires and flooding.

### Other causes of climate change mentioned by participants

The other causes of climate change mentioned were, in order: CFCs (chlorofluorocarbons), global warming, fossil fuels, population, animals. In the urban groups people mentioned that CFCs were a major cause of climate change. When talking about appliances they did not mention energy consumption and instead focused on refrigerators and airconditioning because, they believed, these produce CFC pollution. "Climate change is a result of global warming as a lot of people use A/Cs and refrigerators which emit a lot of chlorofluorocarbons" **O**.

On the face of it this is correct as CFCs are a very powerful greenhouse gas. However CFCs have not been produced in India since 2008 and their replacement, HFCs, which are also a major cause of climate change, were not mentioned in any group. It appears, then, that there is confusion with the earlier role of CFCs in ozone depletion. This was apparent in their conversations: "Climate change is due to the ozone layer depleting and glaciers melting; skin cancer might be caused in the future" B.

Farmers, some of which had listed being vegetarian as a core value, correctly listed animal husbandry as a cause though without an understanding of the exact mechanism by which it affects climate.

Some participants believed that climate change was caused by global warming (these are actually interchangeable terms for the same issue).

People only weakly understand the role of fossil fuels as the cause of climate change

Some participants in the better educated groups understood that burning fossil fuels and carbon dioxide caused climate change, but these causes were rarely among their first associations. Less educated groups did not mention fossil fuels (or coal, oil and gas) at all. They associated climate change with deforestation or the pollution from vehicles, but not with the fuels that power them.

Very few people mentioned coal at all

Only two conversations mentioned coal, and then only in passing before becoming much more involved around other causes of pollution such as firecrackers and burning plastic. Nobody liked the test narratives that mentioned coal. The Delhi groups did not even mention the contribution of coal-fired power stations to air pollution, despite the recent publicity surrounding the closure of the 705 MW Badarpur plant in Delhi, the most polluting power plant in India.<sup>16</sup>

Nobody mentioned electricity production or consumption

Nobody mentioned power stations or consumption or electricity as a cause of climate change.

People mentioned electrical devices that they already associated in their minds with pollution (such as air-conditioning which produces CFCs or room heaters). They did not mention any other uses of electricity such as water heating, lighting, manufacturing or heavy industry.

# People often saw climate change in moral terms and a breakdown in our respect for nature

In every group someone referred to climate change in wider moral or faith based terms: "To put it simply... we are greedy. And day by day the level of greed is only going up, this is just worsening the issue" L. "Corruption allows pollution.. the mentality/mindset of people affects the climate" E. Other participants mentioned apathy, ignorance and greed.

People frequently mentioned our disrespect for the balance or harmony of nature as a leading cause of climate change: "a pure imbalance in nature, greed to consume recklessly, and carelessness about waste discharge and things like these are causing climate change" M. The rural groups spoke in similar terms grounded in faith, saying we had "broken the harmony with nature" G. The rural group in Chamba argued that the earth is a closed system, and that impacts will always come back to them through karma. However they also had a fatalistic view that "we can't do anything about it, it's God's will" P.

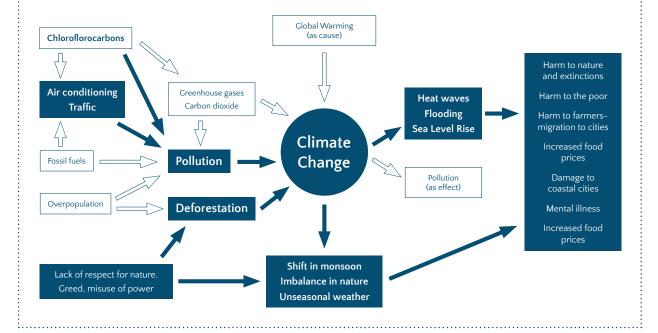
28

People accepted personal responsibility but felt morally challenged by their inability to change behaviour

Participants rejected narratives that blamed government or business and freely accepted the need for personal responsibility: "I think it is the equal responsibility of each and every citizen to take care of the earth" B. However, they recognised this was a major reason why people are not engaged with the issue: "it is not so easy for me to give up an air conditioner or to walk... because it has become also comfortable for us to use these machines that help us and we cannot give them up right now" B.

### Mind map for attitudes to climate change in India

The literature on attitudes often talks of people holding their views within a 'mental map' – what psychologists would call a schema – of culturally formed associations, metaphors and narratives. In the context of India and climate change, the schema looks like this. The primary associations, shown with blue boxes linked by blue arrows, are that pollution and deforestation cause climate change. The most important finding is that most people do not understand that climate change is predominantly caused by fossil fuels as energy sources for transport and electricity generation.



# What do people think are the main impacts of climate change?

We asked people to talk about the main impacts they associated with climate change, their personal experiences, and how they felt people were coping. We were looking for narratives of adaptation, cooperation and resilience.

29

### Heat waves and irregular monsoons are people's primary concerns

Participants were asked to freely identify the main impacts of climate change. In order of prominence these were:

- Heat waves
- Irregular monsoon
- Heavy rains and floods
- Unpredictable and unusual weather patterns
- Drought and water scarcity
- Pollution and unclean water (as a result of climate change)
- Sea level rise (especially the impact on coastal cities such as Mumbai)
- Forest fires

Every group consistently gave the strongest attention to heat waves, followed by the monsoon cycle. Other impacts were chosen according to localised personal experience; for example few participants came from coastal areas and sea level rise was given correspondingly low attention.

30

# People talked about climate change impacts as something new and unprecedented

Although the science shows that climate change intensifies existing extremes, people regarded climate change as a dramatic and distinct shift. Young people with limited experience of weather extremes have accepted this view from their parents and grandparents. A trial narrative suggesting that "India has always had extreme weather events" was rejected.

31

# Weather patterns are deeply embedded in the culture and religious calendar

Indian cultures are exceptionally connected with local weather patterns and this is a major way for people to acknowledge and recognise changes in the weather. In every region there are songs and stories relating to local weather and festivals that are precisely timed to coincide with the seasons. These provide benchmarks against which people are recognising the scale and speed of shifting weather patterns. They featured prominently in conversations – for example that there had been rain during Navratri (a Hindu festival in the autumn, which should be the dry season), and there had been no wind during the Gujarati Uttarayan kite festival in January.

In particular people measured the changing weather by the disruption of the monsoon which had traditionally been considered very reliable – as one local partner said: "in Mumbai we always knew the monsoon would come on the 15th June". A woman in rural Chamba said: "before it used to be fixed when the rain will come; now a day weather forecast with the advanced technology is not able to determine the exact time" P. This notion of a fixed and reliable monsoon is even embedded in the language: "In Gujarat, monsoon is called chaumasa which means it lasts 4 months. But for the last two decades it has lasted maybe two months or less than two months" D

32

# People talk with friends and family about extreme weather but not climate change

Participants said they found it hard to talk about climate change because it was challenging. One student said it was "boring". They did say that they discussed it around extreme and unusual weather events, especially when these relate to the cultural calendar.

33

### Strong awareness of social impacts, especially the effects on farmers

Participants showed a sophisticated understanding of the wider social impacts of climate change. A concern about the welfare of farmers was surprisingly marked among urban participants: "I think farmers are the real sufferers, they are facing a lot lately" K; "farmers' suicides are becoming more frequent due to crop failure" N. This was associated with migration: "people are migrating towards sources of water; farmers are quitting farming to get jobs in other fields" B; "distress, increase in poverty, leading to migration and social and political impacts" F.

One student in Ahmedabad spoke at length of local conflicts over water access and commented that "the third world war will be because of water" **C**. The rural groups felt especially vulnerable to impacts and said that the farmers and poorest would suffer the most but would be forgotten by the planning process ("who akhri byakti hamesha planning se bahar ho jate hein") **G**.

34

### Stories of adaptation focused on personal kindness

When invited to share their own experiences of climate change, and asked how people were coping, each group provided individual vignettes of charity and generosity. This included people taking in their neighbours during flooding, store keepers allowing street dogs to sit in their stores to escape the heat, and people providing drinking water for strangers and buttermilk to traffic police.

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#### Health was prominently mentioned

People were particularly concerned about health. Other surveys confirm that people's concern about the health impacts of climate change are usually as high and sometimes higher than concern about economic impacts. Impacts of safety and availability of water are also leading environmental concerns in wider polling.

People's understanding of the health impacts were sometimes confused. People regarded pollution to be both a cause and an effect of climate change with health impacts on breathing and asthma. Other health impacts included heat stroke, headaches, allergies and skin cancer (which people sometimes confused with ozone depletion), food shortages and increased allergies. All of the Delhi groups expressed concern about the recent surge in cases of mosquito borne disease such as Dengue Fever and Chikungunya (which are suspected but not proven to be linked to climate change<sup>17,18</sup>). It is interesting that participants often mentioned mental health, including depression and potential suicides among farmers.

### What do people think about renewable energy?

We asked people to talk about their understanding of renewable energy, their personal experience, and how the shift to renewable energy might help India.

Renewables were only mentioned when people were directly asked about them

As noted above, people did not strongly connect climate change with energy production. As a result renewable energy was not mentioned in any discussion until the facilitator prompted the discussion.

The dominant association, by a large margin, was with solar PV; after that hydro, then wind

People's associations were based very much on their own experience and what they had observed in their local areas. We would expect wind or hydroelectric power to be more prominent in areas with wind turbines. Nobody in the groups mentioned large scale solar farms, despite a rapid expansion in the past five years that includes the world's largest solar power plant in Tamil Nadu.

There was very little mention of solar water heating and none of biofuels

Although these were mentioned in the facilitator script, these were not repeated in conversations. Traditional heating sources such as wood and dung, the major sources of energy for cooking in rural India, were not mentioned once. Several urban groups referred to drying clothes in the sun as a form of solar power - a curious association that could be used in communications.

People like the idea of renewables and talk about them positively

Four main arguments in favour of renewables recurred in conversations.

- Clean This is in marked contrast to the polluting energy sources. As one student explained: "Solar is clean & not emitting smoke" L.
- Unlimited People liked the idea that the power was unlimited; as one female student put it: "it is unlimited in nature - it never dies" E. By contrast, "the energy sources that are used now cannot be renewed; fossil fuels are going to be depleted and that is the reason they are reaching out to solar" B.
- Reliable Generally people felt that solar was reliable, though with some frustrations about maintenance. By comparison, grid electricity is notoriously unreliable, and subject to blackouts during peak demand.
- Good value Although expensive, people recognised renewables provide good value once the initial capital has been paid. They especially liked the idea that "once you install the system it's free of cost in terms of maintenance; with petroleum you have to pump out, refine it and deliver it whereas air and sunlight is everywhere we just have to install the system" **B**.



# The argument that renewables reduced energy imports was mentioned prominently

Participants in all the better educated groups mentioned early on in the discussions the cost of India's energy imports and proposed that renewables could replace imports. The test narrative "With renewable energy we can be energy-independent, running off our own resources" was strongly supported: "self sustainability is always a positive point" K; "we can benefit environmentally and economically – we will be importing less fuel, so the debt on our GDP will be lowered, and we will eventually have less global warming" C.

This focus may relate to a national pride in economic independence, or relate to the import-substitution policies that dominated government policy until liberalisation in 1991. Possibly for the same reasons of national pride, people strongly rejected a test narrative asserting that "India is dependent on imported oil coal and gas ... and dependent on foreign unstable countries" and some said this was their least favourite narrative. The optimal narrative will therefore stress independence not dependence and will promote a positive option of using Indian natural resources to reduce the costs of expensive imports.

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### Economic opportunity and new jobs...

Students responded well to a test narrative claiming that solar power alone would provide "1 million new green jobs". However older people were more sceptical and overall this narrative was not strongly liked. No one mentioned the economic opportunities and new jobs in conversations, and this is clearly not yet a strong association.

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### At a personal level people have limited experience with renewables not always positive

People's personal experience largely concerned small products such as solar lamps, torches and calculators. Many talked about the limitations of solar cookers or the failures of early model panels. Farmers had used solar pumps, with mixed and sometimes frustrating results.

People drew on these personal smaller scale criticisms to question the overall viability of solar.

Although people could see the potential of solar, their criticisms were based on the perception that solar is a personal liability (in terms of cost, installation and maintenance) compared with grid-based power where the cost and maintenance rests with the provider. Their criticisms included:

- Cost people did not want to shoulder the upfront capital costs and were not aware of currently available grants and subsidies.
- Availability Solar panels are difficult to source: "one cannot just walk in a shop and get solar panels, they are not widely available" E.
- Size Renewables take up space.
- Maintenance Although seen as relatively reliable, people were concerned about the cost and difficulties of technical maintenance.



Women testing a solar cooker. Participants in the Narrative Workshops expressed frustration with the efficiency of these older technologies and this strongly affected their opinion of large scale renewable energy. Photo: <u>UN Photo</u>

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# People liked the idea of national renewable energy but were sceptical about matching supply and demand

All groups said that solar (and wind) were unable to maintain supply: "it might not work properly in winter" **F**. They also pointed to the lack of good energy storage technology. However they responded positively to test narratives that addressed these concerns: that renewables can be "combined with modern energy storage" and that "in the peak of the hot season, solar panels are working the best...providing power when we most need it".

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People did not endorse the vision of decentralised power generation providing access for all

People criticised renewable energy for not being accessible: "I am not getting any shop nearby where I can buy it... it has to reach out and it has to be more accessible" **B**. It is not surprising that they did not accept the argument that renewables could increase access. We tested a narrative, often promoted by environment and development organisations, that solar power can "leapfrog the need for expensive and time-consuming grid connections and provide access to electricity directly to the villages". This argument was not raised spontaneously in the groups and generally tested poorly.

A narrative comparing solar power to mobile phones, "communities could go straight to a local solar system without being connected to the grid just as some villages went straight to mobile phones without ever having a landline connection" was expected to perform well but was rejected by many participants.

### **CONCLUSIONS**

The Indian pilot provides a proof of concept: that national level organisations can conduct qualitative research using a rigorous methodology to a high standard with limited resources and relatively quickly.

The findings we report from the Narrative Workshops were consistent with national surveys with large samples. Although we stress that this report is a first step, particularly in a country as large and diverse as India, we are confident that it is providing accurate direction on effective language.

Many of the insights complement the communication approaches currently being adopted, but others significantly challenge established narratives. Our findings about certain common assumptions, such as people's understanding about the connections between pollution and climate change, or people's relationship with renewables, may be enlightening for many campaigners.

As with all pilot projects there were practical learnings, which are outlined in the report <u>Global Narratives of climate change</u>: a new approach to public engagement research. The training workshop, evaluation workshop and Narrative Workshop materials will be revised in light of the experience in India and applied to future programs. Possibly the most challenging aspect was accessing audiences outside the realm of the local partners' normal context.

Although applied at a national level, we are confident that the Narrative Workshop approach can also be applied within specific audiences: for example with farmers, people of faith, youth etc. We recommend that our partners in India consider further application at an audience level.

#### Suggested next steps for the Global Narratives project:

- 1. Evaluation is undertaken of the use and effectiveness of the key findings from the India pilot project. The training materials are expanded to include video and the direct experience of the Indian trainees.
- 2. The approach is delivered (taking on board the key learnings) in other nations or with specific audiences or specific campaigns to expand audience insights. The objective will be to maintain a consistent approach to both research and reporting so that projects can be cross compared.
- 3. Findings of future projects are collated and updated centrally to provide a global and sustainable resource to support climate communication initiatives internationally.
- 4. The synthesis and analysis of findings are interpreted through the lens of emerging academic research from the field of science communication to ensure best practice in Global Narratives activities.
- 5. A global network of trained climate communication researchers is established (with possible regional or audience grouping) to widen research, update findings and spread understanding within the sector.

### **APPENDICES**

### Appendix 1: What we did - the methodology

Following an intensive two-day training workshop facilitated by Climate Outreach, six local partners (members of CANSA) ran sixteen Narrative Workshops across five Indian states with 154 participants. They met again three months later for a two-day evaluation workshop to compare findings, evaluate the process, and refine the narratives.

The Narrative Workshop methodology developed by Climate Outreach is a form of qualitative research that explores language and narrative around climate change and its solutions. There are two aspects to the methodology which distinguish Narrative Workshops from other forms of focus group research:

- a. Use of a structure and format which promotes peer-to-peer dialogue
- b. Grounding the dialogue in participants' values and identity, which are the sources of their attitudes

This approach is designed to allow participants to engage in conversations about climate change and respond to the narratives provided in their own terms, with reference to the things that matter to them, rather than seek to generate a debate on the basis of complex and abstract science. Hence the process begins by exploring participants' own values, concerns and aspirations rather than a particular policy proposal or technological response. This makes the Narrative Workshop methodology applicable across diverse cultures and with all sections of the population.

Each Narrative Workshop followed the same script, leading participants through six successive topics:

- 1. Values What do you care about? What do you dislike? What makes you proud of who you are?
- 2. National identity How do you feel about India and your place in it?
- 3. Changes What changes have you noticed and what concerns do you have for the future?
- 4. Climate change What does it mean to you and what do you think causes it?
- 5. Climate change impacts What are the impacts and how will you and others cope?
- 6. Renewables What do renewables mean to you and can they replace fossil fuels?

The final activity tested short passages of narrative text that had been co-designed with the local partners during their first training workshop. These presented climate change and renewables around different themes (for example economy, responsibility, or opportunity). The full set of narratives is in Appendix 3. Participants were given print-outs of the narratives (in the Hindi groups these were in Devanagari script) and asked to mark the words or sentences they liked in green and the ones they disliked in red, leaving the ones they neither liked nor disliked unmarked. This method highlights the specific words or phrases that work best - or fail - and enables an easy comparison between the findings of different Narrative Workshops. The facilitator, scanning the marked copies, then lead a discussion about why people liked or disliked specific narratives and drew out general conclusions from the group.

This research was also piloting a new programme to train staff within national level organisations to deliver and interpret Narrative Workshops. The objective of the programme is to increase the skills of local staff and to deliver high quality professional research within limited budgets. A full description of this process is given in the report Global Narratives of climate change: a new approach to public engagement research.

Our Narrative Workshop methodology will be presented in the following forthcoming article: Shaw, C and Corner, A. 'Using a Narrative Workshop methodology to socialise the climate policy debate: lessons from two case studies.' Energy Research & Social Science (forthcoming).

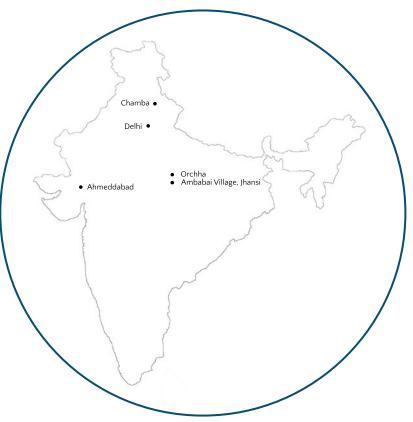
### Appendix 2: Who we spoke to - the demographics

#### Representativeness - drawing national conclusions

This report is indicative and cannot and should not claim to represent all of Indian society. The overall sample has a higher proportion of middle-class and better educated participants than the national population. Youth is also overrepresented in the sample, though this is not inappropriate for a country with the largest youth population in the world.

When interpreting the results, we have been careful to allow for these imbalances - paying particular attention to foreground the views of the less privileged and rural participants.

Recommendations have only been made when they are found consistently across all of the groups. We also compared our findings with previous research projects by the BBC, Yale University, Pew Global Research and the Lowy Institute for International Policy (see Appendix 4). Our findings were consistent with these larger and more representative surveys.



#### Participants of the 16 Narrative Workshops

The six Indian local partners were asked, in their initial two-day training, to identify their chosen target audience and outline its demographics (its composition by age, gender, educational level, income, faith and political values). They were then instructed to recruit their Narrative Workshop groups carefully to be representative of their wider audience. The composition of the sample therefore reflects the priorities of the local partners, in particular engaging youth and rural communities.

The participants in the Narrative Workshops were predominantly young – only 32 of the 154 participants were over the age of 35. Half of the participants in the Delhi and Ahmadabad (Gujarat) Narrative Workshops were college students. These sessions were conducted in English, the main language of higher education.

The students came from economically diverse backgrounds. The Indian government provides substantial benefits for students from lower caste or economic backgrounds so many groups contained people of lower income backgrounds. One of the Narrative Workshops was composed entirely of students from lower income and lower caste backgrounds (in India, referred to as "Economically Backwards Classes"). The students also had geographically diverse origins from across all the Northern Indian states.

Three of the Narrative Workshops were held in rural areas: Chamba (a mountainous region in the Himalayas); Orchha (a culturally distinct region divided between Uttar Pradesh and Madhya Pradesh states) and Uttar Pradesh. These regions rate among the least economically developed in India. Participants in these groups were mostly farmers or service workers and many were illiterate. These sessions were conducted in Hindi.

When participants are quoted in this report, they are referenced with a letter (from A to P) representing their Narrative Workshop group.

Workshop	Partner	Audience	Location	Participants	Demographics	Occupation/Education
А	Centre for Environment Communication (CEC)	Vocational studies students	College of Vocational Studies, New Delhi	12	6 men, 6 women All under 20 years Mostly Hindu	Studying tourism management, human resources, arts
В	Centre for Environment Communication (CEC)	Applied Art students	Department of Applied Art, Jamia Millia Islamia, New Delhi	10	5 men 5 women 18-40 yrs Majority Muslim Included students from Bihar and Uttar Pradesh	Undergraduates
С	Centre for Environment Education (CEE)	Engineering students	Ahmedabad Gujaerat	12	14 women 8 men 8-21 years	Undergraduates
D	Centre for Environment Education (CEE)	Arts students	Ahmedabad Gujaerat	12	6 women, 6 men 18-21 years	Undergraduates
E	Centre for Environment Education (CEE)	Commerce students	Ahmedabad Gujaerat	11	6 women, 5 men 18-21 years	Undergraduates
F	Change Alliance	Colleagues from the organisation Change Alliance	New Delhi	10	5 men, 5 women 30-50 years	Social workers and social development professionals Well educated (mostly graduates) Mixed economic backgrounds
G	Development Alternatives (DA)	Local programme partners, mostly farmers	Orchha, Madhya Pradesh	11	All men, varied ages 20-40 yrs: 4 40-60 yrs: 6 Over 60 yrs: 1 All Hindu and politically conservative	Lower level education Workshop conducted in Hindi Mixed economic backgrounds
Н	Development Alternatives (DA)	Farmers	Ambabai Village, Pahuj, Jhansi, Uttar Pradesh	13	All men. All Hindu Less 20 yrs: 2 20-40 yrs: 8 40-70 yrs: 4	Lower education (4 studied to high school, 6 illiterate)
I		Youth/ students	New Delhi	8	4 men, 4 women	Undergraduates
J		Students and young professionals	New Delhi	8	5 men, 3 women	Students and young professionals
K		Mostly women	New Delhi	8	3 men, 5 women	Mostly professional
L	Indian Youth Climate Network (IYCN)	Politically involved	New Delhi	9	2 women, 7 men All activists in political parties	Varied; mostly educated
М		IYCN volunteers	New Delhi	7	5 women, 2 men	Students
N		Working professionals	New Delhi	8	4 women, 4 men	Professionals; middle class careers
0		"Economically Backwards Classes"	New Delhi	8	6 women, 2 men	Students from lower income backgrounds
Р	Integrated Sustainable Energy and Ecological Development Association (INSEDA)/ Women's Action For Development (WAFD)	Local volunteers and partners	Chamba	7	4 women, 3 men	Mixed occupations (4 homemakers, 1 hospital menial worker, 1 provision store owner, 1 office worker) Workshop conducted in Hindi

### Appendix 3: What we asked - the test narratives

The test narratives were prepared in consultation with the local partners across four stages:

- Firstly Climate Outreach extracted language from existing campaign materials by CAN-I, CANSA, and other Indian organisations. We also drew on articles in the Indian media and high profile political speeches by Indian politicians.
- Secondly, we identified narratives that were known to be successful in our previous research, which included Narrative Workshops with Hindus, Muslims and Buddhists.
- Thirdly, we compiled a long list of narratives from these various sources in an online survey and
  invited our local partners to select the ones they were most interested in testing. We reviewed
  these narratives again on the first day of the training workshop and invited our colleagues to add
  any additional language that they wished to test.
- Finally we drew together the chosen narratives as the following blocks of text. These were also translated into Hindi.

Participants were given print-outs of the narratives (in the Hindi groups these were in Devanagari script) and asked to mark the words or sentences they liked in green and the ones they disliked in red, leaving the ones they neither liked nor disliked unmarked. This method highlights the specific words or phrases that work best - or fail - and enables an easy comparison between the findings of different Narrative Workshops. The facilitator, scanning the marked copies, then lead a discussion about why people liked or disliked specific narratives and drew out general conclusions from the group.

1.

The earth is heating up. We are getting more and more extreme heatwaves. The earth has a fever.

The monsoon is changing and coming at the wrong times. It is not how things are supposed to be. Things are out of balance. The weather is less stable. Seasons are coming at the wrong times.

We need to take action to restore the natural balance. The weather is not normal; it is strange and weird. We can no longer ignore the role of climate change.

We've always had extreme weather events but climate change is like stacking the deck...making the chances much higher.

Taking action on climate change is a matter of fairness. It is not fair that a few energy and oil companies can make huge profits from destroying our air/climate/environment. And it is not fair that the richest people use the most energy but the poorest people will be worst affected by climate change.

2.

The natural world is a precious gift. We are all connected to the natural world, to the water and to the air. And we are connected to each other. Climate change affects everyone and all living things. We have a responsibility to reduce our own carbon pollution because what we do affects everyone else and the whole world. Be a true Indian, live a sustainable lifestyle!

We are proud and resilient. We have strong communities. We will prepare ourselves for climate change, pull together to defend our families and communities against future extreme weather.

Climate change is a major threat for everyone, and no one should be expected to stop it on their own. We all need to pull together to play our part. Governments, businesses, farmers and communities all need to make their contribution. And we as individuals need to play our part. Working together we can stop climate change.

The rich countries have already industrialised and they need to do everything they can to reduce the carbon pollution that causes climate change. The developed world should provide funds and technology to India. In India we have a right to develop so our responsibility is to make wise choices and choose the path of least pollution while meeting the needs of our people.

We cannot wait for help to arrive from the West. India is in the unique position to be the first emerging economy to take action. We can lead on this issue.

#### 3.

India is dependent on imported oil, coal and gas. Every year we send 6 trillion rupees to other countries to pay for these fuels. That is five times more than our national and state governments spend on health altogether.

These fuels are expensive and running out. And they make us dependent on foreign countries - many of them are dictatorships and are unstable with terrorism and war.

But there is a better way. With renewable energy we can be energy-independent, running off our own resources, free from dependence on foreign countries.

The old fuels are already running out. Renewable energy is unlimited because it comes from the sun, wind and rivers. It can never run out. India has always been blessed with natural resources: the water, wind, forests and sun that can supply our energy needs far into the future.

With renewable energy the Indian public will no longer be dependent on the large monopoly power companies. Energy production will be distributed around the country, from solar panels in every village to large scale wind farms, sharing the income from power generation across the whole country, not just handing it to the big energy companies and their foreign suppliers.

Shouldn't an independent democracy like India have an independent and democratic energy supply using Indian resources and Indian technology and sharing the income and benefits across the people of India?

#### 4.

Our power system is always breaking down - often at the peak of summer when we need the electricity the most. Just think of the cost, the misery and even deaths caused by those outages.

We have cuts because we have an old and badly designed energy system that cannot supply power when we need it. We are dependent on a handful of large and unreliable power plants and their high voltage cables. It is like being tied together to the same rope and when anything goes wrong, anywhere, the rope breaks and we all fall together.

Renewable energy is much more secure and reliable. There are thousands of smaller local suppliers in a network from small solar to wind systems. If one supplier has a problem there are always other suppliers to maintain our power. It is more like a net and even if one link fails the net still holds.

And renewables are far better at meeting our energy demands. The peak of the hot season, when our supply most often fails, is exactly when solar panels are working the best. Renewable energy combined with modern energy storage can match supply to demand far better than the old system, providing power when we most need it.

Isn't that what we all want and deserve, a secure energy system we can depend on to provide us with a regular reliable supply for our work, homes and families? Isn't it time to change?

#### 5.

India is modernising rapidly and we should choose the very best energy systems for the future. In the political debate there is no longer any argument from either side about the importance of investing in renewables because they are simply good common sense.

Fossil fuels built India and our modern economy. We are rightly proud of the hard work of the people who produced them. Now it is time to move on, from 20th century to 21st century fuels.

They are called renewables with good reason: they will renew our country and our entire outdated energy sector.

This is not a matter of environment vs economy – we can have both! The best opportunities for new growth is with renewables. Solar power alone will provide 1 million new green jobs.

In India things are changing so fast that we have a unique opportunity to leapfrog over the dirty technologies straight to the best cleanest modern technology. Think of mobile phones. They started being rare and expensive and in just a few years they were everywhere.

Some communities could go straight to a local solar system without being connected to the grid, just as some villages went straight to mobile phones without ever having a landline connection! And every new house could have a solar panel on the roof and be a powerhouse.

And when we embrace the renewables revolution, India will be able to compete with other countries and play a leading position in this new century.

#### 6.

Imagine this. Clean, cheap, reliable energy for everyone. Every house, every school, every village has solar panels and wind turbines. Villagers have light, refrigeration, and fans. Farmers have cheap and constant irrigation water with solar pumps. There are new industries and opportunities. And everyone who is making power is also trading in it, generating local income and jobs.

A quarter of Indians have no access to electricity. This is holding back their opportunities. Is it any surprise that so many people leave their villages and surge into cities?

They have been waiting a long time for power and, with our old dated power system they will have to keep waiting. It will take a generation for the power companies to build new power plants and then put up the power pylons to reach them. We know how bureaucracy and corruption increase the wait for new roads and other development.

Renewable power systems can provide the power they need right now, directly in their villages. Investing in clean energy means investing in our own communities and taking charge of our own energy – creating local jobs and stronger communities, and a more stable climate.

Prime Minister Modi has pledged \$50billion in investment for solar panels on rooftops. But we should demand he goes further, moving out of old fossil fuels altogether and embracing renewable power and the fuel of rural growth. People have been waiting a long time for power – isn't it time to give power now?

#### 7.

The pollution from burning fossil fuels (coal oil and gas) in our cars, homes and power plants is dirtying our air and damaging our health, especially the health of the old, sick and young.

We have banned smoking in public places but the air pollution in many cities is now so bad it is like smoking a packet of cigarettes a day! And air pollution is just as dangerous: it kills over 300,000 Indians every day. We need to "kick that fossil fuel habit."

Now, scientists say, the carbon pollution from these fuels is even changing the weather and shifting the monsoon.

For all these reasons it is time to move from dirty fuels to clean natural renewable energy - solar and wind.

With renewable energy we can close the dirty electricity power plants fired with coal.

Electric vehicles are getting faster and cheaper by the day. With over five thousand new cars and buses coming onto Indian roads every day we have every chance to lead in the electric vehicle revolution too.

So India stands at the crossroads and we need to choose: do we continue with dirty fossil fuels or choose the path to clean renewables. Let's choose the path to a healthy future for our children and a cleaner world for them to raise children of their own.

#### 8.

Many people around the world are now talking about moving to 100% renewable power and moving out of dirty fossil fuels altogether.

Dirty fossil fuels are on the way out. It is inevitable. The national government is now cancelling plans for new coal power plants and says that nearly half of all our electricity will come from renewable power within 15 years.

So why stop there? Surely we can have a future where all our power comes from clean renewable power? We have all the technology, all the brains and all the natural resources we need here in India, now.

The rich countries now realise they made a mistake investing in dirty energy - and they are now closing their coal power stations at huge cost. We have also made mistakes in our electricity industry, using the new technology to cover over our old bad choices. But if you have old worn clothes you don't keep using them with fine silk patches. As we build our new energy systems we have the opportunity to do something new. Surely we should choose the very best and get it right from the beginning.

### Appendix 4: What other research has found

We found four major previous research projects in India exploring attitudes to climate change. None of these tested specific language. Of these only the earliest, by BBC Asia, included qualitative focus groups; the others conducted national surveys.

#### **BBC ASIA - 2003**

In 2003 the British Broadcasting Corporation Asia Unit, with British government development funding, commissioned an ambitious analysis of attitudes around climate change: "How the people of India live with climate change and what communication can do." It included 24 focus groups across 8 locations and a survey. Its larger scale enabled it to access a representative range of audiences including more marginal and lower income groups. It did not develop or test any specific language or narratives and its findings are nearly 15 years old – the CANSA partners advised us that attitudes may have changed significantly during that time. However its broad recommendations for communicating climate change in India are very useful. These were all consistent with our findings and have been incorporated into this report.

#### YALE UNIVERSITY - 2012 to present

Jagadish Thaker and Anthony Leiserowitz at the Yale Project on Climate Change Communication have published several useful studies. The key document for informing this report was their 2012 report 'Climate change in the Indian mind'<sup>8</sup> which is is the most recent and rigorous survey of Indian attitudes to climate change. It drew on a national sample of over 4000, weighted for national demographics. Its key findings are consistent with, and add depth to, our findings and have been referenced throughout this report.

Their paper 'Shifting Discourses of Climate Change in India' investigated the narratives of policy and political elites drawn on 25 interviews. Their 2017 paper 'Media Use and Public Perceptions of Global Warming in India' found that media coverage of climate change was strongly correlated with levels of concern and highlighted its importance in building public support for climate change policy.

#### PEW GLOBAL RESEARCH - 2016

The US-based Pew Global Research includes India in all its regular global attitudes surveys. These regularly include questions on environment and climate change. Our key source was their most recent 2016 attitudes survey.<sup>15,21</sup>

#### **LOWY INSTITUTE - 2013**

The US-based Lowy Institute for International Policy conducted a large survey of Indian attitudes in 2013 which included environment and climate change among its questions.<sup>14</sup>

### REFERENCES

- Virmani P. Note to India's leaders: Your 150m young people are calling for change. The Guardian 2014 Apr 8. Available from: https://www.theguardian.com/commentisfree/2014/apr/08/india-leaders-young-people-change-2014-elections
- Sharma A. Journey of a Nation...: Indian National Congress: 125 Years. Ghaziabad: Academic Foundation; 2011.
- Center for Climate and Energy Solutions. India's Climate and Energy Policies. Arlington: Center for Climate and Energy Solutions, 2015. Available from: <a href="https://www.c2es.org/docUploads/india-factsheet-formatted-10-2015.pdf">https://www.c2es.org/docUploads/india-factsheet-formatted-10-2015.pdf</a>
- Goenka D, Guttikunda S. Coal Kills: An assessment of death and disease caused by India's dirtiest energy source. India, 2013. Available from: http://www.greenpeace.org/india/Global/india/report/Coal\_Kills.pdf
- First Post. Full Text: PM Narendra Modi's speech at the Plenary Session at COP 21 Summit in Paris. First Post 2015 Dec 01. Available from: http://www.firstpost.com/world/full-text-pm-narendra-modis-speech-at-the-plenary-session-at-cop-21-summit-in-paris-2527862.html
- Radjou N, Prabhu J, Ahuja S, Roberts, K. Jugaad Innovation: Think Frugal, Be Flexible, Generate Breakthrough Growth. John Wiley & Sons; 2012
- Gambhir V, Kumar P. India: How the people of India live with climate change and what communication can do. Climate Asia, BBC, 2003. Available from: http://downloads.bbc.co.uk/rmhttp/mediaaction/pdf/climateasia/reports/ClimateAsia\_ IndiaReport.pdf
- Leiserowitz A, Jagadish T. Climate change in the Indian mind. Yale University: Yale Project on Climate Change Communication, 2012. Available from: http://environment.yale.edu/climate-communication-OFF/files/Climate-Change-Indian-Mind.pdf
- Duttal S. India becomes second largest domestic LPG consumer. The Times of India 2017 Feb 06. Available from: http:// timesofindia.indiatimes.com/business/india-business/india-becomes-second-largest-domesticlpg-consumer/ articleshow/57008531.cms
- 10. In the ten years 1992-2002 net emissions (deforestation less reforestation) were around 400,000 tonnes of carbon dioxide per year, around 0.02% of total emissions. Kaul M, Dadhwal VK, Mohren GMJ. Land use change and net C flux in Indian Forests. Forest Ecology and Management 2009; 258: 100-108.
- Forests remove carbon from the air and, in total, Indian forests remove 68 million tonnes/year CO2, enough to offset half the cement industry. INCCA. India: Greenhouse Gas Emissions 2007. Indian Network for Climate Change Assessment, Ministry of Environment and Forests, Government of India, May 2010. Available from: http://www.moef.nic.in/downloads/public-information/
- 12. Corner A, Roberts O, Pellisier A. Young Voices: How do 18-25 year olds engage with climate change? Climate Outreach, 2014. Available from: http://climateoutreach.org/resources/research-reveals-current-climate-engagement-strategiesare-failing-to-reach-young-people/
- 13. "In traditional India dirt is primarily social rather than physical. In the past Indians have been more fundamentally concerned about the social cleanliness and purity of groups than the physical cleanliness of individuals or objects". Milner M. Dirt and Development in India. Virginia Quarterly Review 1987; 63: 54-71. Available from: https://sociology. virginia.edu/sites/sociology.virginia.edu/files/DirtandDevelopmentinIndia.pdf
- 14. Medcalf R. India Poll 2013. Lowy Institute for International Policy 2013 May 20. Available from: https://www.lowyinstitute. org/publications/india-poll-2013
- 15. Pew Research Center. India and Modi: The honeymoon continues. Pew Research Centre 2016 Sept. Available from: http:// www.pewglobal.org/2016/09/19/1-how-is-india-doing/
- 16. The Economic Times. The Badarpur Plant's effect on Air Pollution and why it needs to be shut down. The Economic Times, 2016 Aug 12. Available from: http://economictimes.indiatimes.com/the-badarpur-plants-effect-on-air-pollution-andwhy-it-needs-to-be-shut-down/changetheair\_show/53669369.cms
- 17. Naish S, Dale P, Mackenzie JS, McBride J, Mengersen K, Tong S. Climate change and dengue: A critical and systematic review of quantitative modelling approaches. BMC Infectious Diseases 2014; 14(167). Available from: http://bmcinfectdis. biomedcentral.com/articles/10.1186/1471-2334-14-167
- 18. Padma TV. India should probe climate change-dengue link. The Third Pole, 2015 Sept 28. Available from: https://www. thethirdpole.net/2015/09/28/india-should-probe-climate-change-dengue-link/
- 19. Thaker J, Leiserowitz A. Shifting discourses of climate change in India. Yale University: Yale Project on Climate Change Communication, 2014 Mar 04: http://climatecommunication.yale.edu/publications/shifting-discourses-of-climate-
- 20. Thaker J, Zhao X, Leiserowitz A. Media use and public perceptions of global warming in India. Yale University: Yale Project on Climate Change Communication, 2017 May 23. Available from: http://climatecommunication.yale.edu/publications/ media-use-public-perceptions-global-warming-india/
- 21. Pew Research Center. Emerging and developing economies much more optimistic than rich countries about the future. Pew Research Center 2014 Oct. Available from: <a href="http://www.pewglobal.org/2014/10/09/emerging-and-developing-">http://www.pewglobal.org/2014/10/09/emerging-and-developing-</a> economies-much-more-optimistic-than-rich-countries-about-the-future/