

Can coal be used for cheap energy without harming the environment?

AN OPEN DIALOGUE



ABDULLAH SHIBLI

CLIMATE change will hit Bangladesh, and rising temperature and sea level will affect millions in both the short- and long-term. However, it has also embarked on a path to accelerate growth and achieve middle-income status in the immediate future. As a consequence, our energy need, particularly consumption of electricity, is increasing. With demand for electricity growing by 10 percent a year, it needs to more than double production, to over 30,000 megawatts by 2030. How can we achieve the dual objectives, to achieve sustainable growth and combine it with its commitment to reduce carbon emissions or Nationally Determined Contributions (NDCs)?

Apparently, Bangladesh appears to be caught in a bind, with limited options to ramp up electricity generation. The Power Division of our government aims to generate 19,000 megawatts of coal-powered energy by 2030 to provide energy for all at a low cost. Energy experts, at home and abroad recognise that renewables, in the form of solar and wind, will still represent a small fraction of overall energy generation.

We can take comfort from the fact that we are not the only country that is caught between a rock and a hard place. The International Energy Agency (IEA) forecasts coal use in electricity generation to grow 33 percent by 2040. Demand for coal in Southeast Asia alone is expected to increase 4.8 percent a year through to 2035. Meeting increasing electricity demand requires a huge expansion in the region's power system, with coal and renewables accounting for almost

70 percent of new capacity. As one expert put it, "The link between access to affordable power from coal, economic growth and prosperity is clear."

How do we then move towards a point where (until we reach middle-income status and 100 percent of our population is connected to the grid) we can take advantage of cheap sources of energy, i.e. coal and natural gas, and minimise the impact on the environment? Since SDG 13 stipulates action to combat climate change and its impacts, while SDG 7 urges the global community to ensure access to affordable, reliable, sustainable and modern energy for all, the challenge for policymakers is to find a balance between "affordable energy" and "climate impact".

As a low-income country, Bangladesh has to chart its own path to sustainable and low-cost energy. To ensure that burning coal does not cause collateral damage on health, air, land and water, power plants must be efficient and leave only a modest "carbon footprint". With a few additional major coal-powered generating plants going up in the coming years, we must not only pay attention to the health and environmental impact of burning coal, including air pollution, water pollution and solid wastes, but also from heavy metals such as arsenic, cadmium, chromium, lead, and mercury.

Fortunately, research and technology on clean energy have opened up new possibilities. However, the international community must step up and play its part to enable developing countries to implement available technology to transform the low-cost sources of energy into clean energy to fuel their economic development. After the World Bank ceased lending for coal-fired power stations in 2010, it has been slow in terms of financing clean technology. IEA has raised concerns about international investors moving away from coal and the risk that this presents: "If development banks withhold financing for

coal-fired power plants, countries that build new capacity will be less inclined to select the most efficient designs because they are more expensive, consequently raising CO2 emissions."

Bangladesh along with its South Asian neighbours have set an ambitious goal to electrify their countries by 2030. The Philippines, Thailand, Cambodia, Laos, and Myanmar, Vietnam, and Indonesia plan 100 percent electricity access, and all except

SDG financing forums, or multilateral development aid. Given these very real energy needs, we must tap all sources of energy and all low emission technologies available to us. This includes ultra-supercritical coal plants, high efficiency, low emission coal (HELE), and carbon capture and storage (CCS) technologies.

The Trump administration is also advocating the creation of a global fossil fuel alliance that would include countries "willing to

would be exporting High Efficiency Low Emission (HELE) coal technology to India and other developing markets to help them achieve energy security. The Japan-United States Strategic Energy Partnership's priorities for 2017 and 2018 includes deploying highly efficient, low emissions coal technology, as well as energy infrastructure, in South Asia and Sub-Saharan Africa, as an essential component of the "global fossil fuel alliance" of US efforts to help electrify developing countries.

Perry also discussed advances in the field of carbon capture and storage (CCS), a process which traps carbon dioxide during the coal-burning process and buries it underground. CCS prevents around 90 percent of CO2 emissions from entering the atmosphere. Many scientists suggest CCS technologies will be indispensable to meeting the Paris Accord emissions reductions targets. China currently has eight major CCS projects in development, while Japan's Tomakomai CCS Demonstration Project is achieving promising results in capturing CO2.

Bangladesh's energy infrastructure can also benefit from technology transfer from China, which has recently made great strides in the renewable energy aspect of the equation. According to the IEA, three nations will account for approximately two-thirds of global renewable energy expansion through 2022, China, India, and the US. China is also now considering a plan to increase its purchasing of American coal as part of its most recent pledge to make significant efforts to narrow its trade deficit with the US. If China, Japan, and the US can spread these and other innovations across Asia to burn coal more efficiently, they could help the region significantly reduce its carbon footprint.

Dr Abdullah Shibli is an economist, and Senior Research Fellow, International Sustainable Development Institute (ISDI), a think-tank in Boston, USA. His new book *Economic Crosscurrents* will be published later this year.



PHOTO: SAM PANTHAKY/AFP

Myanmar and Cambodia are set to reach that target by 2020. Their governments see providing power for these people as an overriding short-term priority and are leveraging coal to generate electricity.

Transfer of technology in the area of power generation, treatment of waste and carbon disposal, and renewable energy ought to be set as priorities in international discussions whether in climate change committees,

make fossil fuels cleaner rather than abandoning them." US Energy Secretary Rick Perry often refers to this approach as "new energy realism" in global power development, noting that fossil fuels are absolutely essential for developing countries, especially in those where many people still have no electricity.

Speaking at the Indo-Pacific Business Forum last month, Rick Perry stated the US

Achieving religious harmony in a world of fear and populism



JAMES M DORSEY

THIS is a tough time for men and women of the cloth, at least those whose message is one of peace, tolerance, mutual respect, equality and inter-faith dialogue.

Underlying the rise of populism, nationalism, protectionism, fear of the other, anti-migrant and anti-foreigner sentiment, and hate speech is an erosion of the norms of debate. Articulation of hate speech has become permissible, if not fashionable.

Intolerant, racist and supremacist have risen in significance even in democratic societies that project themselves as open, tolerant guarantors of equal rights irrespective of nationality, ethnicity, religion, colour or sexuality. Suppressing those voices through laws and bans drives hate speech and racism underground, it doesn't erase or eradicate it. Countering it with a message of tolerance and mutual respect won't erase it either, but can help shape an environment in which those principles become dominant again.

Let's face it, prejudice is a fact of life. Its inbred in whatever culture each of us adheres to and whatever education at home and in schools that we have enjoyed, irrespective of how conservative or liberal our family and societal backgrounds are.

In other words, prejudice is not the issue, it is how we deal with it, how we manage it. The problem arises when we lose our sense of relativity, when we adopt an absolutist approach, the high way or no way.

To quote Mahatma Gandhi, a deeply religious Hindu, who said in 1942: "I believe

with my soul that the God of the Qur'an is also the God of Gita and that we are all, no matter by what name designated, children of the same God. My whole soul rebels against the idea that Hinduism and Islam represent two antagonistic cultures...To ascent to such a doctrine is for me a denial of God."

In the battles in the late 1940s and 1950s over a proposed national ban in India on the slaughter of cows, Gandhi declared himself a worshipper of cows whom he regarded with the same veneration as he viewed his mother. Yet, Gandhi, went on to say that "the Hindu religion prohibits cow slaughter for the Hindus, not for the world. The religious prohibition comes from within. Any imposition from without means compulsion. Such compulsion is repugnant to religion."

On a visit in 1942 to a German camp populated by Indian prisoners of war captured from the British during fighting in North Africa, Subhas Chandra Bose, a deeply religious leader of the Indian independence movement, reportedly warned inmates that "if you use religion to unite yourself today, you leave the door open for someone to divide you later using the same sentiments."

Recent history validates Bose's warning, not only in India and Pakistan, but across the globe expressed in Islamophobia, anti-Semitism, and anti-Shiism, just to name a few.

Many of you represent faiths with multiple sects, legal schools and interpretations—proof that your belief system in the narrow context of that system is open to multiple interpretation. Some of those interpretations may be intolerant, anti-pluralistic, supremacist. They too are a fact of life, like it or not. Countering them depends on the social environment one creates, a sphere within which men and women of the cloth have an important role to play as well. It is also a function of the social

and economic policies implemented by governments.

Indeed, the key is not suppression, what is suppressed doesn't go away, at best it goes into hibernation, only to re-emerge at some point in the future. The key is containment, communities and societies that make discriminatory, racist, supremacist expressions socially taboo. That key is not enforcement by force of law, but by social custom and an environment in which those expressions are continuously challenged in public debate, social settings and individual encounters. I am not talking about political correctness that stifles debate.

Leaving aside those whose beliefs are absolute and intolerant of any other view, a majority of people gravitate towards the middle. It's what some call moral shock or what former trader Nassim Nicholas Taleb dubbed black swans coupled with economic, social and societal uncertainty and political manipulation that drives people towards more literal, absolutist, intolerant beliefs.

The last two decades have witnessed a renewed hardening of fault lines, not just ones between strands of Islam and Christianity, but across the board. This latest round started in 2001 with the moral shock of the September 11 attacks in New York and Washington and subsequent attacks across Europe as well as in Asia and Africa that continue until today. 9/11 was the death knell of multi-culturalism and the cradle of the latest wave of Islamophobia and rising anti-Semitism.

The economic financial crisis of 2008-09 with its decimating effect on the lower and middle classes, the flourishing of jihadism, the impact of heinous attacks close to home and the fear, a human being's most irrational emotion, that generated the breeding ground

for populism, nationalism, protectionism and the return to primordial, absolutist beliefs propagated by multiple sources, including men and women of the cloth.

To be sure, the groundwork for this pre-date 9/11, fuelled by some strands of Christianity, massive Saudi funding across the globe of ultra-conservative strains of Islam, and the use of religious intolerance by leaders and governments because it served a political purpose.

Pakistan illustrates what this can produce. The tolerant and live-let-live types live in a bubble, primarily in Pakistan's three foremost cities, Karachi, Lahore and Islamabad. The gravity of society has shifted towards intolerance, anti-pluralism and supremacism. Ultra-conservatism has been woven into the texture of segments of society and the culture of some institutions of the state. It is a world in which absolute truth rules supreme, discrimination based on an absolute truth is anchored into law, competence is determined not exclusively on the basis of merit but on what faith one adheres to, democratic freedoms are curtailed. Mob lynching becomes acceptable, violence against minorities the norm, and anti-blasphemy the tool.

It's a trend that is not unique to Pakistan and not unique to the Muslim world. It is a trend that is nurtured by the rise of populism, nationalism, authoritarianism and autocracy visible across Western societies, the Muslim world and Israel, in other words irrespective of cultural-religious roots.

In most, if not all of these countries, significant segments of the population have no real stake in society. Intolerance, anti-pluralism, racism and supremacism fuel the perception of disenfranchisement and marginalisation that often produces a sense of not having

anything to lose. It is some combination of religious ultra-conservatism, exclusivist ethnic and nationalist sentiment, and lack of a stake that creates breeding grounds for militancy and extremism.


Men and women of the cloth working in Singapore are in many ways privileged. While Singapore regulates hate speech or expressions it believes would undermine harmony, it has been successful in ensuring that all segments of the population have a stake in society—perhaps the most important factor in combatting discrimination, racism and supremacism as well as militancy and extremism.

Singapore demonstrates messages of tolerance and inter-ethnic and inter-faith harmony can and will be heard in a political and social environment that fosters mutual respect and dialogue.


There is however one caveat. Peace and harmony in society requires peace and harmony at home. The divisions and animosity between different religions and ethnicities at large are reflected in divisions and animosity within faith groups.

Tolerance, mutual respect and dialogue starts in one's own community and its message is as credible as one practices it without exception. That probably requires a redefinition of the concept of absolute truth. That's a tough order, but no one claims that ensuring that a peaceful and harmonious existence and future would be easy. It also is a litmus test of one's sincerity.

Dr James M Dorsey is a senior fellow at the S Rajaratnam School of International Studies, co-director of the University of Würzburg's Institute for Fan Culture, and co-host of the *New Books in Middle Eastern Studies* podcast. He is the author of *The Turbulent World of Middle East Soccer* blog, and a book with the same title, among several others.



QUOTABLE Quote



SIR WALTER SCOTT
(1771-1832)
Scottish writer and historian

Teach self-denial and make its practice pleasure, and you can create for the world a destiny more sublime than ever issued from the brain of the wildest dreamer.

CROSSWORD BY THOMAS JOSEPH

ACROSS

1 Optimally

7 Baby bull

11 Entertain at bedtime

12 Tibet setting

13 Clothing feature with a flap

15 Build

16 Indiana city

18 Marching band instrument

21 Night spots

22 Tahini base

24 Termination

25 Barracks bed

26 Utter

27 Roosevelt's successor

29 Get up

30 Heroic story

31 Cello's kin

32 Poultry buy

34 Lunar landing aid

40 "Horton Hears" -

41 "Becket" actor

42 Freshman, usually

43 Hook-billed bird

DOWN

1 Ellipse bit

2 Hot drink

3 Saloon

4 Yard tools

5 Building unit

6 Hit the bottle

7 Prickly plant

8 Inquire

9 Tell tales

10 Dietary concern

14 Big singing group

16 Movie category

17 Make sense

19 Starting point

20 Stock-pile

21 Wager

22 Bart, to Homer

23 Iris's place

25 Chocolate source

28 Millionth of a meter

29 Ill will

31 Diner seating choice

33 Debate group

34 Mob pariah

35 Lamb's mom

36 English article

37 Colorful carp

38 Moose cousin


39 Golfer's need

Write for us. Send us your opinion pieces to dsopinion@gmail.com.


YESTERDAY'S ANSWER

T	O	S	C	A		T	O	A	D	S
O	N	A	I	R		U	N	C	A	P
N	O	T	R	E		R	A	I	M	I
					C	A	I	N		
A	C	O	U	S	T	I	C			
B	A	W	L		S	P	A	R	T	A
C	R	E	A	K		S	L	O	O	P
S	Y	S	T	E	M		C	A	R	E
				E	P	I	C	U	R	E
B	I	B	T	A	L	L				
O	N	E	N	D		E	A	R	L	S
S	T	A	I	R		A	T	E	A	T
S	O	U	P	Y		T	E	D	D	Y




BEETLE BAILEY



BY MORT WALKER



BABY BLUES



BY KIRKMAN & SCOTT