



**BARRY CARIN**

Barry Carin is a senior fellow at CIGI. He has served in a number of senior official positions in the Government of Canada and played an instrumental role in developing the initial arguments for the G20 and a leader's level G20. Barry brings institutional knowledge and experience to his research on the G20, international development, energy and climate change.

**AFRICAN CLIMATE CHANGE NEGOTIATORS NEED A NEW STRATEGY**

BARRY CARIN

**KEY POINTS**

- Africa should avoid a mendicant negotiating strategy that demands financial transfers from developed countries.
- African negotiators should concentrate on a package deal of infrastructure investment and long-term energy exports.
- This strategy is more likely to succeed than current efforts, and could lead to progress in global energy security of supply, universal access to modern energy for Africans and reduced greenhouse gas (GHG) emissions.

*Climate change can increase the opportunity space for Africa to invest in renewable energy technologies, turn agriculture into a booming industry, build human and institutional capacities towards a knowledge economy that supports innovation, research and development; invest in climate services in ways that will leverage the potential of hydro-meteorological services so they can act as a credible resource for farmers and a range of people dependent on natural resource assets.*

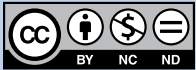
—Fatima Denton, Coordinator of the United Nations Educational, Scientific and Cultural Organization

**INTRODUCTION**

There is currently little prospect of a successful international agreement resulting in effective, legally binding emission targets and significant “new and additional finance transfers” to developing countries; however, there is room for Africa to formulate an effective strategy in climate change negotiations. A bit

Copyright © 2014 by the Centre for International Governance Innovation

The opinions expressed in this publication are those of the author and do not necessarily reflect the views of the Centre for International Governance Innovation or its Operating Board of Directors or International Board of Governors.



This work is licensed under a Creative Commons Attribution-Non-commercial — No Derivatives Licence. To view this licence, visit ([www.creativecommons.org/licenses/by-nc-nd/3.0/](http://www.creativecommons.org/licenses/by-nc-nd/3.0/)). For re-use or distribution, please include this copyright notice.

player in climate change negotiations, with little leverage over the major emitting countries, Africa is wasting time with its current strategy of pursuing elusive emission targets and illusory financing.<sup>1</sup> Africa can bring creative ideas to the negotiating table to reduce global emissions and enlarge “the size of the pie” for all parties. A strategic “carrot and stick” approach can make a positive contribution to an eventual international climate agreement and maximize Africa’s portion of the expanded pie.

An effective strategy would concentrate on a full-court press on investment in energy infrastructure in the United Nations Framework Convention on Climate Change (UNFCCC), the Group of Twenty, the International Energy Forum and all other relevant UN bodies. Africa framed a common position for the November 2013 UNFCCC negotiations; similarly, the African Union has developed a common position on the post-2015 development goals. It is timely for Africa to formulate and promote a continental energy investment strategy to deploy in future climate negotiations. The African contribution to the climate change solution should be a “package deal” to provide universal access to energy on the continent in exchange for long-term,

---

1 See the Byrd-Hagel Senate Resolution (1997), passed unanimously with a vote of 95–0, noting “the United States should not be a signatory to any protocol to, or other agreement regarding, the United Nations Framework Convention on Climate Change of 1992, at negotiations in Kyoto in December 1997, or thereafter, which would...mandate new commitments to limit or reduce greenhouse gas emissions for the Annex I Parties, unless the protocol or other agreement also mandates new specific scheduled commitments to limit or reduce greenhouse gas emissions for Developing Country Parties within the same compliance period.” In the European Union (EU), “32 countries that are considered ‘developing countries’ under the [UN] Convention have a higher per capita GDP than the EU Member State with the lowest per capita GDP. By 2020 and beyond this number may have increased even further. ...[the future] Agreement will need to take this new reality into account, and move beyond a developed/developing country paradigm into one in which a broader range of countries will be expected to shoulder a share of the responsibility to provide the necessary means” (European Commission 2013).

secure access to African energy resources. Instead of petitioning for financial resources and a special adaptation fund, Africa could offer long-term contracts for electricity based on renewable energy, as well as for natural gas and oil, in exchange for partnerships in constructing and owning the necessary energy infrastructure. Climate change negotiations are not going to produce vast transfers of financial resources. Africa has entered past negotiations as a mendicant, losing leverage early. If African countries cooperate, the continent can become a source of energy to Europe. Africa can become an energy source at least as reliable as Russia or the Middle East — while simultaneously contributing to lowering global emissions.

The 12-point “Africa Position on Climate Change,” recently presented to the United Nations (shown on the next page), will have little impact. African negotiators must be more pragmatic and strategic to influence events.

## THE SYNERGY OF DOMESTIC AND INTERNATIONAL PRIORITIES

Africa must understand the US process of determining the negotiating bottom line. Developing countries’ insistence on “new and additional” climate finance is an unattainable fantasy in the US Congress.<sup>2</sup> Any reasonable burden-sharing formula would assign 20 to 30 percent of the global cost to the United States — resulting in an amount that is simply not credible. Similarly, Africa should exploit China’s predominant

interest in future security of supply<sup>3</sup> and the value of what Africans bring to the table. While the United States has cut the amount of oil it imports from African countries from an average of roughly two million barrels per day to about 170,000 since 2010, effectively pushing African oil to Asia (China now gets a third of its oil from Africa), it is in the United States’ interest “to keep the world oil markets stable and well supplied amid large amounts of chaos and outages” (Philips 2014). Africa must be pre-emptive, and promote cogent ideas for win-win initiatives well before the formal negotiating events.

In Sub-Saharan Africa, 600 million people are without electricity (USAID n.d.). There is no disagreement that access to energy is an essential ingredient for African economic growth and poverty reduction. The International Energy Agency (IEA) estimates that US\$300 billion is required for Africa to achieve universal electricity access by 2030 (Whalen 2014).

In 2005, a German study noted the complementarity of Africa’s solar energy resources and the European Union’s technological and financing capacities: “Wind, geothermal power from hot dry rocks, hydropower and biomass power potentials are each in the order of about 400 TWh/y.. The by far biggest resource in MENA [Middle East and North Africa] is solar irradiance, with a potential that is by several orders of magnitude larger than the total world electricity demand” (DLR 2005). Concentrated solar power (CSP) technology uses reflective material to concentrate the sun’s rays to power steam turbines or engines. When combined with thermal storage — which enables a plant to produce power under cloud cover and after the sun has set — CSP can generate electricity on demand, not just when

<sup>2</sup> For example, nine Democrat senators wrote a letter to President Obama in December 2009, noting “any new US climate change laws should establish a national system of border adjustments, in concert with emission allowances or rebates to trade and energy-intensive sectors of the economy.” See [http://green.blogs.nytimes.com/2009/12/03/in-letter-to-obama-senators-state-conditions-for-supporting-climate-bill/?\\_r=0](http://green.blogs.nytimes.com/2009/12/03/in-letter-to-obama-senators-state-conditions-for-supporting-climate-bill/?_r=0).

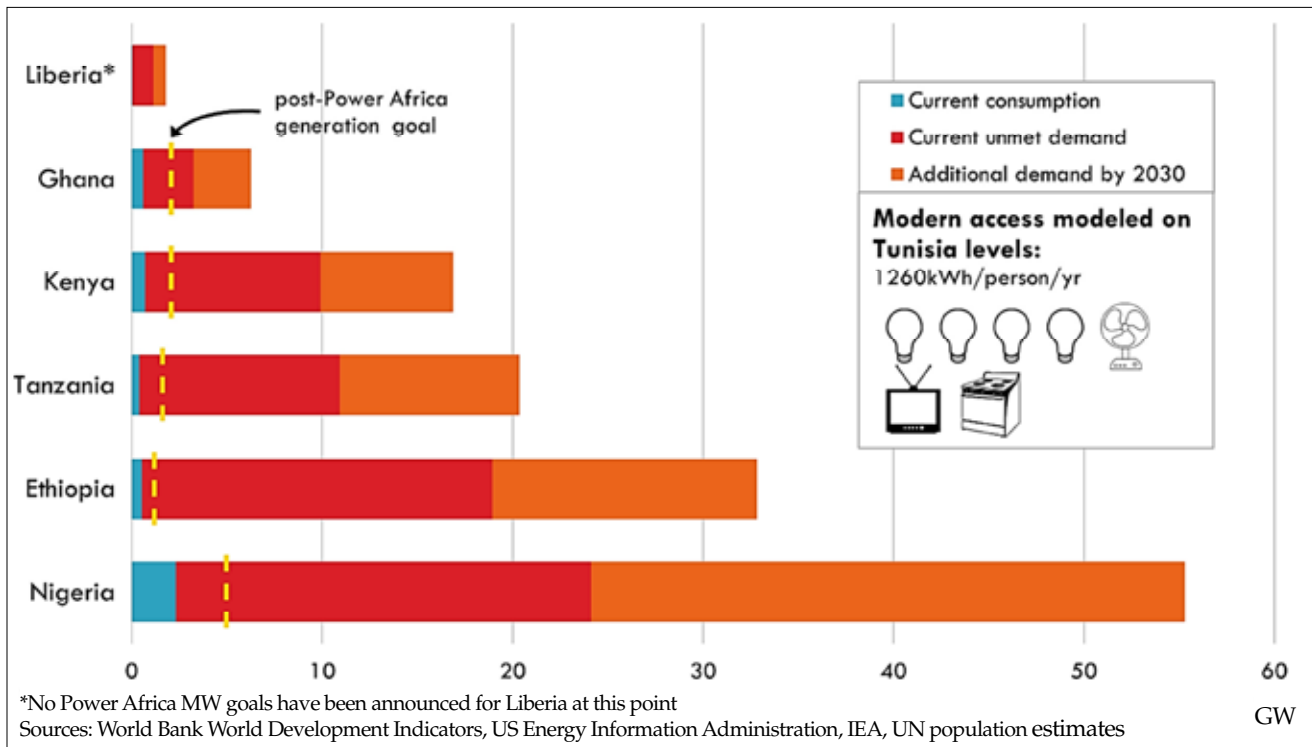
<sup>3</sup> See Ma (2013) and the Stanley Foundation (2006).

**AFRICA POSITION ON CLIMATE CHANGE PRESENTED TO THE UNITED NATIONS**

1. Increase the capability of Africa, LDCs [least developed countries] and SIDS [small island developed states] to address adaptation to climate change more effectively, through support to national climate change adaptation programmes such as NAPA [National Adaptation Programmes of Action] and similar country-driven adaptation programmes. GEF [Global Environment Facility] should set aside more financial resources in the area of adaptation to climate change, which should include a special fund for Africa in this regard.
2. Mobilize and provide additional financial resources to Africa for climate-friendly technologies to address both the urgent adaptation and mitigation needs of Africa and other developing countries.
3. Enhance the participation of Africa in the market-based mechanisms to address climate change through demonstration projects, support to institutional capacity needs and building a critical mass of experts within Africa in the areas of carbon trade and international climate change negotiation skills.
4. Provide technical and financial support for Africa to increase energy availability, particularly in the rural areas, energy diversification and for ensuring energy security for investment promotion in climate change-friendly development areas.
5. Ensure equal treatment of Africa in addressing climate change by providing financial support and incentives for mitigating CO<sub>2</sub> emissions through avoided deforestation and for acting as a global sink of CO<sub>2</sub>.
6. Restructuring the current global system of participating in market-based mechanism terms of CDM [Clean Development Mechanism] within the Kyoto Protocol that has left Africa as a spectator in the whole process. CDM rules and procedures are working against Africa unless there is a deliberate move to address the current barriers.
7. Support countries to address the vulnerability to climate change through support to early warning systems, adaptation needs assessment and adaptation activities.
8. Support the development of innovative indigenous and other technologies for both adaptation and mitigation to climate change, such as drought-resistant crops, crop diversification, improved farming technologies, better irrigation techniques, [and] control of climate-related disease such as malaria and dengue fever.
9. Support development of infrastructure resilient to the impacts of climate change such as sea level rise, recurrent floods and other impacts of extreme weather events.
10. Support the establishment of climate centres within Africa and cooperative mechanisms (South-North and South-South) in order to address regionalspecific climate change impacts and adaptation needs.
11. Provide technological and financial support to non-SIDS Africa countries, as well as low-lying, land-locked and other African countries that are particularly vulnerable to the impacts of climate change.
12. Conduct gender impact analysis to identify gender-specific needs and protection measures related to floods, droughts and other disasters and involve women in all aspects of decision making relating to adaptation and mitigation, including disaster risk reduction and choice of adaptation technologies.

Source: [www.un.org/esa/sustdev/csd/csd15/statements/africa\\_cc.pdf](http://www.un.org/esa/sustdev/csd/csd15/statements/africa_cc.pdf).

**POWER AFRICA'S TARGETS FALL SHORT OF MEETING MODERN DEMANDS**



Source: [www.cgdev.org/sites/default/files/energy%20pov%204%20unmet%20demand.png?itok=3i9CMdJY](http://www.cgdev.org/sites/default/files/energy%20pov%204%20unmet%20demand.png?itok=3i9CMdJY).

the sun is shining. There are estimates that within one to two decades, solar energy will be able to compete on a cost basis with energy produced by coal plants, which emit high levels of CO<sub>2</sub>.<sup>4</sup>

Most hydro power potential lies in central and western Africa, oil and gas resources are located in the western and northern parts of the continent and coal reserves are concentrated almost exclusively in southern Africa. Geothermal generation is being developed only in eastern Africa; according to the CEO of Ghana’s Volta River Authority, Joshua Ofedie, the energy potential is 9,000 megawatts in the Rift River Valley in east Africa (Civil G8 2006).

4 See IEA (2009); and Gereffi and Dubay (2008). See also [www.iea.org/publications/freepublications/publication/name,3864,en.html](http://www.iea.org/publications/freepublications/publication/name,3864,en.html); [www.iea.org/publications/freepublications/publication/CSP\\_Essentials.pdf](http://www.iea.org/publications/freepublications/publication/CSP_Essentials.pdf); and [www.cggc.duke.edu/environment/climatesolutions/greeneconomy\\_Ch4\\_ConcentratingSolarPower.pdf](http://www.cggc.duke.edu/environment/climatesolutions/greeneconomy_Ch4_ConcentratingSolarPower.pdf).

**INCREASING THE SIZE OF THE PIE**

Building on existing priority programs can enlarge the size of a “win-win” dividend. Research collaboration can exploit the energy supply potential of concentrating solar thermal power and solar lighting replacing kerosene.<sup>5</sup> Solar power may make sense in climates with plenty of sunshine, especially where its output corresponds to the daily demand for air conditioning. North Africa may be able to export surplus solar electricity to Europe. A medium- to longer-term forecast would have CSP facilities producing hydrogen to blend with natural gas to provide low-carbon liquid.<sup>6</sup>

5 See [www.solar-aid.org/?gclid=CPLg8MCv\\_70CFY17fgodTh0A4Q](http://www.solar-aid.org/?gclid=CPLg8MCv_70CFY17fgodTh0A4Q).

6 See [www.iea.org/publications/freepublications/publication/csp\\_roadmap.pdf](http://www.iea.org/publications/freepublications/publication/csp_roadmap.pdf).



USAID's Power Africa approach is another example that could help fill the energy infrastructure gap.<sup>7</sup> The participation of foreign private sector and sovereign wealth funds in partnerships could be encouraged through equitable arrangements for the ownership of African infrastructure. This approach can capitalize on China's interest in security of energy supply. There is a credible argument that access to electricity will reduce deforestation, since charcoal will no longer be required for cooking, increasing the contribution of forests as a carbon sink absorbing atmospheric CO<sub>2</sub>.<sup>8</sup>

## **CHALLENGES**

The challenges to a "package deal" of investment in energy infrastructure in exchange for long-term, secure access to African energy resources relate to intra-Africa cooperation and the security of supply. In order for money to flow on the scale required, there will need to be cooperation among African states. History is littered with many trans-Africa projects that failed to come to fruition because of a lack of cooperation.<sup>9</sup> There are concerns about security, defending vulnerable transmission lines and violence against the facilities (for example, recent events in Algeria and Nigeria).<sup>10</sup> Given the recent kidnapping of a diplomat in Libya, kidnapping of schoolgirls in Mali and bombing of

shopping centres in Abuja, does it make sense to make long-term capital investments in Africa?

At first sight, security concerns may seem to be an overwhelming barrier, especially given recent events. Energy infrastructure investments involve long-distance pipelines and transmission lines, which can be vulnerable to attack. Africa has seen recurring violence against energy facilities. But the alternative is increasing reliance on the Middle East and Russia. The Middle East is more chaotic than Africa. Terrorists are very active in Syria, Yemen and Iraq. In the last decade, oil installations, pipelines and tankers have been subject to numerous terrorist attacks in the Middle East and off the shores of Aden. Saudi energy infrastructure was targeted by terrorist groups in 2006, but heavy protection has so far prevented major problems (Reuters 2013).

According to Bassam Fattouh (2007) at the Oxford Institute for Energy Studies, "concerns that terrorist attacks can force the oil industry to its knees are, however, exaggerated. Terrorist attacks usually have temporary effects and damage is rapidly repaired." Spare, redundant capacity makes it straightforward to bypass damaged pipelines or transmission lines and limit losses. Anthony Cordesman (2006) has concluded that direct attacks on energy facilities by Islamic extremist groups are rare because these groups see energy export earnings as serving national needs and not just those of the regime or Western energy interests. In any case, all the transit routes for access by Russian and Middle East energy may be equally vulnerable. On balance, there is no reason to believe that threats to the security of African facilities are worse than future challenges in transit through the Black Sea or the Caucasus.

The other question is whether Africans can find a way to cooperate. The key is to build on the institutions of the African Union and NEPAD (the New Partnership for

7 In June 2013, President Obama announced an initiative to double access to power in Sub-Saharan Africa. See the White House (2013).

8 See, for example, [www.abb.com/cawp/abbzh258/051d295b8c237da0c1256f6500462ea5.aspx](http://www.abb.com/cawp/abbzh258/051d295b8c237da0c1256f6500462ea5.aspx).

9 For example, Ethiopia's plans for a massive expansion of hydroelectricity has alarmed Egypt and the Nile basin countries, which seem unable to agree on the distribution of the potential benefits of the Nile.

10 In January 2013, a terrorist attack on a gas facility in Algeria left close to 40 hostages dead; in Nigeria, extremist groups such as Boko Haram have threatened to target oil facilities.

Africa's Development). African countries have a choice between "hanging together or hanging separately." Reason will prevail as long as it can be demonstrated that the dividends of cooperation are large enough to make every country a big winner.

## RECOMMENDATION

Africa should place finance ministers at the centre of negotiations, replacing environment ministers. The real issues are primarily economic and financial — the parameters of investment agreements for infrastructure to provide renewable energy to Africans and to enable efficient low-carbon energy exports. While energy and industry ministries have more to contribute to climate negotiations than environment ministries, it is finance ministries who control the key instruments — taxes, subsidies and budgetary appropriations. It is time to change the mindset from a defensive and mendicant posture to one of negotiation among equals, delineating a positive sum game. Africa has cards to play — sticks as well as carrots. To get US and Chinese attention, it could, like Indonesia, decide on a continental basis to withdraw from all bilateral investment treaties.<sup>11</sup> Africa should offer a "package deal" to mobilize an order of magnitude increase in investment in modern energy infrastructure. Such a deal would provide universal access in Africa and security of supply to energy importers, and it would provide fair returns to all investors and, most importantly, make a major contribution to limit future GHG emissions — displacing oil with gas and solar power and reducing African deforestation.

## CONCLUSION

Africa should reframe its approach to climate change negotiations. Mindful of the insuperable obstacles to the present strategy of seeking legally binding targets and financial transfers, Africa should offer a "grand bargain" as its contribution to a climate change deal: long-term secure access to African clean and low-carbon energy resources with investment in infrastructure that will also provide universal access to energy on the continent. Africa could offer long-term contracts for electricity based on renewable energy, as well as for natural gas and oil, in exchange for partnerships in constructing and owning the necessary energy infrastructure. This approach is more likely to succeed than petitioning for financial resources and a special adaptation fund. A cogent positive sum proposal could provide progress in global energy security of supply, universal access to modern energy for Africans and a significant contribution toward reduced GHG emissions.

## WORKS CITED

- Bland, Ben and Shawn Donnan. 2014 "India to Terminate More than 60 Bilateral Investment Treaties." *Financial Times*, March 26. [www.ft.com/intl/cms/s/0/3755c1b2-b4e2-11e3-af92-00144feabdc0.html#axzz2zkw4qGsF](http://www.ft.com/intl/cms/s/0/3755c1b2-b4e2-11e3-af92-00144feabdc0.html#axzz2zkw4qGsF).
- Byrd-Hagel Resolution. 1997. 105th Congress, 1st Session. S. Res. 98. [www.nationalcenter.org/KyotoSenate.html](http://www.nationalcenter.org/KyotoSenate.html).
- Civil G8. 2006. "Africa Urged to Reap Its Alternative Energy." <http://en.civilg8.ru/1226.php>.
- Cordesman, Anthony H. 2006. *The Changing Dynamics of Energy in the Middle East*. Westport, CT: Praeger Publishing.

11 See Bland and Donnan (2014).

- DLR. 2005. "Concentrating Solar Power for the Mediterranean Region." MED-CSP Final Report. [www.dlr.de/tt/med-csp](http://www.dlr.de/tt/med-csp).
- European Commission. 2013. "The 2015 International Climate Change Agreement: Shaping International Climate Policy beyond 2020." Brussels. [http://ec.europa.eu/clima/policies/international/negotiations/future/docs/com\\_2013\\_167\\_en.pdf](http://ec.europa.eu/clima/policies/international/negotiations/future/docs/com_2013_167_en.pdf).
- Fattouh, Bassam. 2007. "How Secure Are Middle East Oil Supplies?" Oxford Institute for Energy Studies.
- Gereffi, Gary and Kristen Dubay. 2008. "Concentrating Solar Power: Clean Energy for the Electric Grid." Center on Globalization, Governance & Competitiveness. November. [www.cggc.duke.edu/environment/climatesolutions/greeneconomy\\_Ch4\\_ConcentratingSolarPower.pdf](http://www.cggc.duke.edu/environment/climatesolutions/greeneconomy_Ch4_ConcentratingSolarPower.pdf).
- IEA. 2009. *Renewable Energy Essentials: Concentrating Solar Thermal Power*. IEA. [www.iea.org/publications/freepublications/publication/CSP\\_Essentials.pdf](http://www.iea.org/publications/freepublications/publication/CSP_Essentials.pdf).
- Ma, Damien. 2013. "China's Search for a New Energy Strategy: Time to Liberalize Energy Prices." *Foreign Affairs*. June 4. [www.foreignaffairs.com/articles/139425/damien-ma/chinas-search-for-a-new-energy-strategy](http://www.foreignaffairs.com/articles/139425/damien-ma/chinas-search-for-a-new-energy-strategy).
- Philips, Matthew. 2014. "U.S. Oil Imports from Africa Are Down 90 Percent." Bloomberg Businessweek. May 22. [www.businessweek.com/articles/2014-05-22/u-dot-s-dot-oil-imports-from-africa-down-90-percent](http://www.businessweek.com/articles/2014-05-22/u-dot-s-dot-oil-imports-from-africa-down-90-percent).
- Reuters. 2013. "Middle East Energy Export Chokepoints." *Financial Post*, August 29. [http://business.financialpost.com/2013/08/29/middle-east-energy-export-chokepoints/?\\_\\_lsa=f822-9cf1](http://business.financialpost.com/2013/08/29/middle-east-energy-export-chokepoints/?__lsa=f822-9cf1).
- The Stanley Foundation. 2006. "China's Energy Security and Its Grand Strategy." Policy Analysis Brief. September. [www.stanleyfoundation.org/publications/pab/pab06chinasenergy.pdf](http://www.stanleyfoundation.org/publications/pab/pab06chinasenergy.pdf).
- USAID. n.d. "Leveraging Partnerships to Increase Access to Power in Sub-Saharan Africa." [www.usaid.gov/powerafrica](http://www.usaid.gov/powerafrica).
- Whalen, Michael. 2014. "Brighter Nights in Africa." *The Breakthrough*. February 19. <http://thebreakthrough.org/index.php/programs/energy-and-climate/brighter-nights-in-africa>.
- White House. 2013. "Fact Sheet: Power Africa." Press release. June 30. [www.whitehouse.gov/the-press-office/2013/06/30/fact-sheet-power-africa](http://www.whitehouse.gov/the-press-office/2013/06/30/fact-sheet-power-africa).



## ABOUT CIGI

The Centre for International Governance Innovation is an independent, non-partisan think tank on international governance. Led by experienced practitioners and distinguished academics, CIGI supports research, forms networks, advances policy debate and generates ideas for multilateral governance improvements. Conducting an active agenda of research, events and publications, CIGI's interdisciplinary work includes collaboration with policy, business and academic communities around the world.

CIGI's current research programs focus on three themes: the global economy; global security & politics; and international law.

CIGI was founded in 2001 by Jim Balsillie, then co-CEO of Research In Motion (BlackBerry), and collaborates with and gratefully acknowledges support from a number of strategic partners, in particular the Government of Canada and the Government of Ontario.

Le CIGI a été fondé en 2001 par Jim Balsillie, qui était alors co-chef de la direction de Research In Motion (BlackBerry). Il collabore avec de nombreux partenaires stratégiques et exprime sa reconnaissance du soutien reçu de ceux-ci, notamment de l'appui reçu du gouvernement du Canada et de celui du gouvernement de l'Ontario.

For more information, please visit [www.cigionline.org](http://www.cigionline.org).

## CIGI MASTHEAD

Managing Editor, Publications	Carol Bonnett
Publications Editor	Jennifer Goyder
Publications Editor	Vivian Moser
Publications Editor	Patricia Holmes
Media Designer	Steve Cross

## EXECUTIVE

President	Rohinton Medhora
Vice President of Programs	David Dewitt
Vice President of Public Affairs	Fred Kuntz
Vice President of Finance	Mark Menard

## COMMUNICATIONS

Communications Specialist	Declan Kelly	<a href="mailto:dkelly@cigionline.org">dkelly@cigionline.org</a> (1 519 885 2444 x 7356)
Public Affairs Coordinator	Erin Baxter	<a href="mailto:ebaxter@cigionline.org">ebaxter@cigionline.org</a> (1 519 885 2444 x 7265)



57 Erb Street West  
Waterloo, Ontario N2L 6C2, Canada  
tel +1 519 885 2444 fax +1 519 885 5450  
[www.cigionline.org](http://www.cigionline.org)

