



BusDev Solutions

Business Development for a Resilient Future

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Acting on the 21st Century Challenge: Climate Change

BusDev Solutions guides leaders and their organizations through managing change / developing informed and participatory leadership / unlocking diversity / seeding resilience. **Reducing / mitigating climate change effects** and **preparing for / adapting to** a changed reality requires aligning these efforts around the following levels of actions:

- Participatory Leadership through **Immediate, Daily Action** by every individual;
- Informed Leadership through **Renewable Energy Efficient Investments** by owners / investors;
- Participatory Leadership through **Collective Action** in communities / schools / places of worship / sports teams / other group-member affiliations;
- Informed Leadership through **Policies / Legislation / Incentives / Coordination** by politicians / officials / executives on the local / city / state / regional / federal level.

What We Knew in 2017. In 2017 BusDev Solutions Partner, Joaquin Matias, co-authored *A Call to Action: How to Save Millions of Lives*.¹ The following key highlights provided in this primer on climate change serve as a reference / comparison to where we are today.

- Our behavior is continuing to increase levels of global greenhouse emissions, which trap heat and raise global temperatures. Rising temperatures trigger extreme weather events generally characterized by **too little water** (desert / arid / drought) or **too much water** (rising seas / heavy storms / flooding).
- Coastal communities located at or barely above sea level / in desert, arid and drought-prone areas are facing **increasing devastating flooding / extended, debilitating drought periods**.
- We have the technology² / information to slow down / mitigate against these emissions.
- Slowing down global carbon emissions from **increasing to 500ppm**³ expected by 2067 is key to avoiding the **extreme effects** of climate change with **3°C / 5.4°F temperatures increases / extreme weather / rising seas / threatened global food supplies / mass migrations**.⁴

Where We are Today, 2020. We are not meeting the 2015 Paris Agreement minimum target of reducing annual global carbon emissions so that temperatures do not increase by 2.0°C / 3.6°F. Experts say this is the **danger zone**⁵ where we are already **“dangerously close”** to abrupt and **irreversible changes**, or **tipping points**.⁶ These include a heatwave in Greenland; partial collapse of West Antarctic ice sheet; more rapid permafrost thawing that is releasing methane / carbon dioxide; and rapid decline of Arctic sea ice. Tipping point are small changes with large, long-term consequences—accelerating the climate change dynamic.⁷ Even with projected



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carbon emissions from human activity declining by 8% due to COVID-19, global greenhouse gases continues to climb with the May monthly average of 417.2 ppm.⁸ The May reading does not reflect the growth of vegetation during summer that reduces gases through photosynthesis.

If We Do Not Act, What Can We Expect. **Serious climate change effects** will **arrive faster**, as early as **2040**⁹ at **lower temperature increases** of 1.5°C / 2.7°F¹⁰ —threatening food security, transportation, energy and other essential systems. By **2050**, many cities will feel like southern cities in 2020. Month-long heat waves / rapid-burning, spreading fires / severe rainstorms / droughts with weather whiplashing / swinging from intense rain to extreme drought will become frequent.¹¹ 1/3rd of the global economic harm would result from the permanent submersion of low-lying areas by coastal flooding risk and 2/3rds from the destruction of extreme high tides / storm surges / breaking waves as they reach farther inland.¹² In the United States, alone, some **300,000 homes** worth **\$117B** will be **severely damaged / destroyed** with chronic tidal flooding by 2050.¹³ “What makes climate change so insidious is that it alters hazards, like flooding, just enough to turn what otherwise could have been just an emergency into a disaster, and disasters into catastrophes.”¹⁴ And in these locations, disenfranchised / marginalized / low-income / often brown-black, minority communities—who already lack quality affordable housing / affordable healthcare / food security—will be harder hit by such **environmental injustice**.

Mitigating / reducing the causes of global warming is no longer enough, we must also **adapt** to a changed / changing reality. Those in low-lying coastal / drought-stricken areas will face little choice other than **managed retreat / relocation**.¹⁵

Moving from Polemics to Action. While advocacy raises consciousness / promotes action; Nature only recognizes **proactive action**. This means cutting emissions by half of current levels by 2030¹⁶ to limit global warming to 1.5°C / 2.7°F under Paris Agreement. We can / must begin with **Immediate, Daily Actions** like: **reduce heat controls in winter – raise ac controls in summer / recycle – reuse – repurpose / avoid plastic – reuse plastic / reduce food waste – compost – eat less red meat / drive less – carpool more / use renewable energy / wash with cold water – shorter showers**. Everyone can exercise **participatory leadership** through these **Immediate, Daily Actions** and create an **Awareness + Action Culture**. Community organizers can expand / deepen this culture. Owners / investors with **informed leadership** must **shift to renewable sources / reduce energy wasting status quo / change business – corporate culture / lobby for financial / policy / regulatory support**. Politicians must provide the **coordinating structures / regulatory frameworks / incentives** to shift / facilitate these behaviors / investments. Collectively through these actions we can achieve a vibrant, **renewable energy economy by 2040**.



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¹ Kaufman, E., Matias, J. F. (2017) *Call to Action: How to Save Millions of Lives*.

² Among the technologies discussed in *Call to Action* include biofuels, carbon sequestration, geothermal energy, see Chapter 8, *Call to Action*, op. cit.

³ Annual carbon emissions measured in parts per million.

⁴ Nicola Jones, “How the World Passed a Carbon Threshold and Why It Matters,” *YaleEnvironment360*, January 26, 2017. Climate change can escalate / multiply other threats to security, see Chapter 6, *Call to Action*, op. cit.

⁵ Denise Chow, “Carbon dioxide hits a level not seen for 3 million years,” *NBC Mach*, May 14, 2019.

⁶ Henry Fountain, “Climate Change is Accelerating, Bringing World ‘Dangerously Close’ to Irreversible Change,” *NYT*, Dec. 5, 2019.

⁷ Fountain, op. cit.

⁸ Henry Fountain, “‘Like Trash in a Landfill’: Carbon Dioxide Keeps Piling Up in the Atmosphere,” *NYT*, June 4, 2020.

⁹ Coral Davenport, “Major Climate Report Describes a Strong Risk of Crisis as Early as 2040,” *NYT*, Oct. 7, 2018.

¹⁰ Nathan Eagle, “Hawaii 2040: Climate Change Is Already Here. And We’re Running Out of Time,” *Civil Beat* (2020).

¹¹ Umair Irfan, Eliza Barclay and Kavya Sukumar, “Weather 2050: America is Warming Fast,” *VOX*, July 19, 2019.

¹² Brad Plumer, “Rising Seas Could Menace Millions Beyond Shorelines, Study Finds,” *NYT*, July 30, 2020.

¹³ Michael B. Sauter and Thomas C. Frohlich, “These American cities will soon be under water,” *USA Today*, June 18, 2019.

¹⁴ Christopher Flavelle and Henry Fountain, “Hurricane, Fire, Covid-19: Disasters Expose the Hard Reality of Climate Change,” *NYT*, Aug. 4, 2020

¹⁵ *Call to Action* lays out how to develop a Plan Relocation: criteria of selection, planning around aligned sustainable + resilient community design, a master plan, political / governance structures, financial structures and securing build-out capital / financing—all along an inclusive, participatory model. See Chapter 6 & 11, *Call to Action*, op. cit.

¹⁶ Irfan, et. al., “Weather 2050,” op. cit.