



## Financial Protection in Any Weather

April 2018

Wx Risk Global, LLC is a global Weather Solutions company



## Executive Summary

### The Problem

Weather volatility and uncertainty (risk) hinders the achievement of nearly all GIIN Standards because each standard is geared towards the elimination of marginalization.

To be marginalized means to be denied academic and professional opportunities to become financially self-sufficient. It also places unequal systemic and institutionalized barriers to access to resources and support. In terms of weather risk, those that are marginalized are most vulnerable because they do not have the financial means to prepare for adverse weather (extreme and abnormal) and lack the proper access to resources and support needed to recover when weather anomalies occur.

On the same note, the effects of Climate Change exacerbate the issue. As Climate Change increases the frequency, severity, and duration of abnormal weather, so too does it increase weather risk. Individually, those who are marginalized also become increasingly less incapable of financial preparation and protection. However, what is most interesting is that while marginalized individuals become more in need of support of resources and support due to climate change, barriers grow because the support that is available (charities, foundations, NGOs, and governments) is forced to focus on financially preparing itself from Climate Change. As a result, achieving GIIN Standards is further deterred.

To progress the achievement of GIIN Standards, a systematic approach to eliminating the negative impact of weather volatility, uncertainty, and Climate Change must address the financial burdens faced by those that are marginalized when adverse weather occurs. Not only should this model direct access to affordable methods to minimize weather risk of marginalized individuals, it should also encompass ways in which to protect the support systems that, the marginalize so desperately depend on.

Hence, the founding of Wx Risk Global, LLC...

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***The market size of sustainable, responsible and impact investing for 2016 in the US alone, was \$8.72 trillion, or one-fifth of all investment under professional management.***

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## About Wx Risk Global, LLC

Wx Risk Global is a Weather Risk Solutions and brokerage firm that specializes in assisting clients navigate, financially mitigate, and/or profit from the effects of weather anomalies that severely hamper their top and bottom lines. The solutions that Wx Risk Global creates for its clients incorporate the use of parametric risk-transferring instruments such as weather derivatives that are designed to financially compensate in the event of adverse weather conditions and events.

Wx Risk Global cannot exist without functioning in accordance with its Mission, Values and Vision. The spirit of its values provides its team with the realization that every day they are in pursuit of something much larger than personal successes. As such, all strategic decisions of the company are made in order to do their part in making the world a better place.

They also understand that what they do is important. The IMPACT that they are capable of providing to the world brings progress to both social action and environmental protection. Therefore, their company focuses its efforts on these aspects. They constantly introduce the newest innovations within the realm of Weather Risk mitigation and pursue the best course of action to protect **ALL** from the negative effects of weather on finances.

In light of this, Wx Risk Global's primary business focus is working with entities that directly improve the livelihoods of those who face socioeconomic hardships and fall victim to marginalization. Entities such as, but not limited to, NGOs, charities, foundations, and governments are given the opportunity to act in both a client and partner capacity. Wx Risk Global does this because it recognizes its ability to allow these entities to externally create impactful weather-risk hedging programs that are specialized to the needs of those they serve as well as internally provide budget security and immediate additional capital to carry out its purpose.

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*Weather derivatives can significantly offset economic impacts caused by inclement weather.*

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### Mission & Beliefs

*"To alleviate the financial pressures of weather uncertainty for those who are most vulnerable."*

Wx Risk Global recognizes the intricate connection between quality of life and the environment. Accordingly, the company believes that as more cost-effective and less resource-depleting solutions to protecting finances from adverse weather become more accessible, so too comes the decrease of our global carbon footprint. And as a result of this environmental relief, the weather will also normalize, making its impact less of a detriment to human well-being.



## Values & Commitment

*“Humanity & Environment are our values. We defend these values as we protect you from adverse weather.”*

An unwavering commitment to their mission, values and vision is based on the understanding that what the company provides is not meant to be a luxury for a select few, but rather a necessity for ALL and the environment. Wx Risk Global is by its very nature a company that devotes all available resources to creating and initializing the implementation of weather risk mitigating solutions, no matter unique needs of the client.

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***Wx Risk Global uses an innovative structured financial mechanism to provide a return on investment, with minimal risk, while offering need-based communities, financial cover, when bad weather occurs.***

## Vision & Actions

*“A world where weather protection is a human right and not a privilege.”*

Wx Risk Global primarily dedicates its efforts towards partnering with organizations to develop programs that promote Social and Environmental IMPACT. These Program-Related Investments provide philanthropists the ability to finance weather protection solutions for those who are incapable of protecting themselves.

By virtue of who they are, what they do, what they believe in, and who they work with, Wx Risk Global is a company that is specifically designed to encompass 19 of the 26 GIIN standards because it's very purpose is to ultimately minimize impact of one of the most prominent hindrances of achieving these standards which is, bad weather.

## WX Risk Global, a Dagda Certified Social Impact/Sustainable Company.

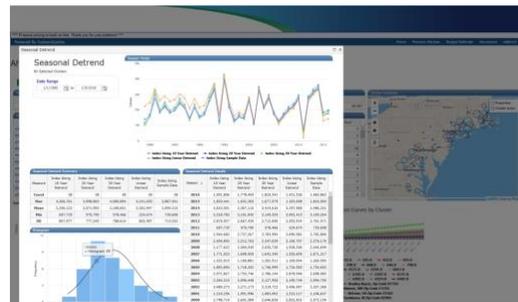
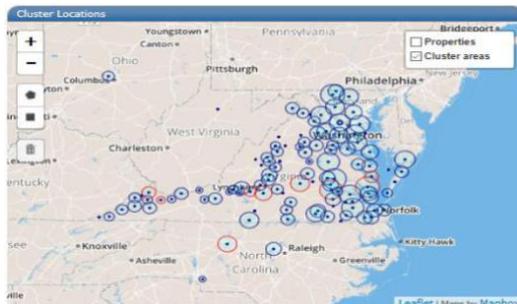
# Wx Risk Global Solutions

Wx Risk Global’s Solution offerings are designated to address three primary forms of weather risk. The Budget Defense solution is designed to mitigate risk associated with incremental losses due to “everyday” weather conditions (temperature, rainfall) that deviate from optimal levels. Catastrophic Protection as the name suggests targets the risk associated with severe, catastrophic weather and natural peril events (i.e. storm and earthquakes). And finally, the IMPACT Program Creation solution targets the risk associated with being incapable of protecting one’s own finances from either of the previous two risk types.

## Budget Defense

It has been recognized that traditional weather analytic companies that are hired by some of the most prominent Fortune 500 Companies charge their clients annual subscriptions to their services ranging from the tens of thousands of dollars to the millions. These services only project potential losses, and they are incapable of providing viable risk-transferring portfolio solutions.

The Budget Defense solution is a unique online platform that performs a historical analysis of selected weather effects on expenses, revenues, or volumes, and creates a customized weather risk portfolio that triggers payouts from weather-related losses. With this platform, Wx Risk Global provides a method of identifying weather risk based on user-submitted financial data, a customized portfolio that mitigates the identified risk, and the ability to further monitor the portfolio’s performance at a fraction of the cost.





By utilizing the Budget Defense solution, NGOs, charities, foundations, governments and the marginalized are guaranteed:

- ❖ **Revenue Protection** by including derivative structures that act as complementary revenue stream as weather becomes increasingly unfavorable to your primary line of business
- ❖ **Expense Control** by including structures that are meant to incrementally supplement excessive expenses due to increasingly adverse weather.
- ❖ **Budget Certainty** which comes in consequence to the previous two benefits, and ultimately guarantees a significantly less volatile budget. This constant allows for budget dollars to be allocated more efficiently and effectively, and eventually lead to business growth.

## Catastrophic Protection

Following natural catastrophes, immediate relief and recovery is vital for the survival and future economic prosperity of communities in the affected areas.

Catastrophic Protection provides the needed certainty that emergency funding will be distributed within days based on modeled wind speed (and precipitation) for severe storms or on peak spectral acceleration (PSA) and peak ground acceleration (PGA) of an earthquake at the protected location. The time required to prepare a claim and the months of lag time as a result of the claim filing process does not exist with Catastrophic Protection because the determining factor of a payout is based on the presence and intensity of the catastrophe; not loss of life or property. This makes Catastrophic Protection a more immediate and a less complex source of funding than traditional insurance.

Also due to the fact that Catastrophic Protection is not indemnity-based, payouts can be used for any and all purposes. NGOs, charities, foundations, and governments can adjust where to allocate the immediate funding based on their most pressing needs during a time of chaos.

The design of this solution also provides these entities the option of investing with the intent of exponentially increasing their available capital in times of catastrophe or used as a tool to replenish their reserves to make sure that they are capable of helping future events.

### Catastrophic Weather Event WITHOUT Protection

Available Capital *Before* Catastrophic Weather Event



Available Capital *After* Catastrophic Weather Event



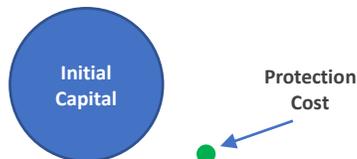
For example, without Catastrophic protection the client's capital reserves are completely exposed to the risk of being depleted due to a catastrophic weather event.

Limited to only its initial capital when the catastrophic event happens, the client then has to decide to either reserve a portion of its capital for the next imminent event to occur, or to deplete all of its funds during the one event with the understanding that they would not be able to help if a second event happens in the near future. Both decisions hinder the effectiveness of the client's relief/recovery efforts.

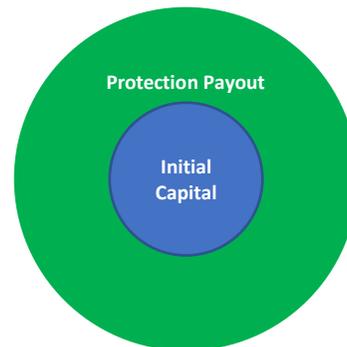
In addition, fundraising and other forms of income generation, to replenish capital, also takes significant time, effort, and in most cases, additional funding. Rather than focusing on its pursuit of helping others in the event of a catastrophic events, the client has to commit its efforts elsewhere. Also, there is no guarantee of success. The client must hope to be able to raise adequate capital in time before the next catastrophic event while using the least amount of capital and manpower to do so.

### Catastrophic Weather Event WITH Protection

Available Capital *Before* Catastrophic Weather Event



Available Capital *After* Catastrophic Weather Event





With protection, while the client must devote a small portion of its initial capital to pay for Catastrophic Protection, additional immediate funds would be available via the protection payout in the event of a catastrophic weather event. The client then has the option of utilizing the newly acquired funds to replenish capital reserves for future catastrophic events or to exponentially its relief/recovery efforts.

In either case, Catastrophic Protection is a solution that allows the client to focus its efforts on generating revenues for protection while resting assured that their capital reserves will never be depleted.

## IMPACT Program Creation

Wx Risk Global understands that it is impossible to design programs that perfectly align with every organization's purpose and whom their purposes serve.

Instead, if an organization's primary intent or purpose is to directly improve the livelihood of those who have socioeconomic hardships, Wx Risk Global extends the opportunity to partner in designing and implementing IMPACT programs that directly align with the organizations purpose.

Along with this partnership, Wx Risk Global also provides:

- ❖ The organization's name and logo added to the Wx Risk Global partnership webpage
- ❖ The Program details posted on the website to seek others interested in collaborating or supporting the program's cause;
- ❖ A portion of generated income if modest returns are made as result of the program

## Included with Each Solution

Wx Risk Global aims to establish for each client, full transparency and knowledge of their personal weather risk and transferring solution. Included with every weather solution, Wx Risk Global provides:

1. **Comprehensive Analysis:** Performing a comprehensive analysis of each financial transaction to establish customized risk transfer programs.
2. **Brokerage Price Discovery:** Discover the best prices available for risk transfer within its network of trusted Weather Risk product suppliers; and
3. **24/7 Monitoring:** Monitor the models throughout the transaction period to track weather risk transfer model's effectiveness for further improvement.



## Ownership Composition



**Rebecca Leonardi**

Managing Partner

- ❖ 20 Years: Capital Fundraising
- ❖ 7 Years: Weather Risk Management
- ❖ Weather Risk Product Structuring Specialist
- ❖ Florida State



**Pete Bouchard**

Managing Partner

- ❖ 28 Years: Weather Forecasting
- ❖ 13 Years: 7 News Chief Meteorologist: Boston, MA
- ❖ 6 Years: Weather Risk Management
- ❖ Lyndon State College



**Joseph Alston**

Managing Partner

- ❖ 7 Years: Financial Markets
- ❖ 7 Years: Weather Risk Management
- ❖ Weather Risk Product Specialist
- ❖ Davidson College



**Joseph Alston**

Managing Partner

- ❖ 30 Years: Investments & Banking
- ❖ VP Investments at Merrill Lynch
- ❖ Managing Partner at Catalyst Investments and Kwiatkowski & Investments, LLC
- ❖ University of Maryland

Ownership is composed of four individuals. Rebecca Leonardi (woman) and Joseph Alston (African-American) have a combined ownership stake that is greater than 51 percent. Therefore, Wx Risk Global, LLC can be identified as an Disadvantaged Business Enterprise (DBE).

## Achieved GIIN Standards

### Social Impact

#### [Generate Funds for Charitable Giving](#)

At the very heart of Wx Risk Global's business model is providing charitable and philanthropic entities a cost-effective way of offsetting the risk of financial and infrastructural loss after adverse weather conditions and events.



As the world has warmed, that warming has triggered many other changes to the earth's climate. Changes in extreme weather and climate events, such as heat waves and droughts, are the primary way that most people experience climate change. Over the last 50 years, much of the world has seen increases in prolonged periods of excessively high temperatures, heavy extreme downpours, and in some regions, severe (1000+ year) floods and droughts. Events such as the Colombia mudslide (2017), the recent Peru floods which claimed one-hundred lives, and Hurricane Matthew in Haiti which caused over 600 deaths and US\$2.7 billion in economic losses, highlight the need to address the underlying social and economic forces that place humans in harm's way.

Wx Risk Global was created to address this risk head-on. The company works directly with organizations to assemble complex derivatives designed to offset the tremendous expense levied on areas affected most by weather-related events. While also providing services to for-profit entities, Wx Risk Global also aims to generate funds to invest in weather risk products solutions for charitable projects individually.

### [Access to Clean Water & Sanitation](#)

Weather risk product solutions can provide clean water to drought-stricken countries in their greatest times of need, after a severe weather event.

Wx Risk Global can also create solutions that provide water to homeless shelters in locations where the temperatures reach triple digits and water becomes imperative, like during an extreme prolonged heat waves.

The rate of improvement in access to safe drinking water has long been in decline. According to, World Health Organization and United Nations Children's Fund (WHO/UNICEF), and Joint Monitoring Programme (JMP), "844 million people don't have clean water". In 2000, the world set a target as part of the Millennium Development Goals (MDGs) to halve the proportion of people without access to improved sanitation facilities, (from 1990 levels) by 2015. Over this period, progress was made in increasing the share with access from 54 to 68 percent. However, this fell short of the 77 percent target by 2015. Universal access to sanitation therefore remains one of the world's greatest development challenges. Over the period from 1990-2015, a further 29 percent of the global population gained access to sanitation.

After an extreme weather event, it is therefore paramount to restore safe drinking water and sanitation to regions affected. Wx Risk Global's weather-based derivative solutions are key to organizations seeking to offset this costly process.

### [Access to Education](#)

Weather risk product solutions can reduce or even eliminate weather-driven budget variances, (i.e. utility costs, winter weather cancelations, delays, etc.) and can also provide the capacity to reallocate budgets toward investing in school supplies, improved technology & infrastructure on a school, district, and county-level.



Access to a proper education in the 21<sup>st</sup> Century is one of the cornerstones of self-sufficiency and of joining society as a productive and contributing member. In 20 years, today's children will be adults, with life stories and experiences that are unfolding right now. In 20 years, today's students will be professionals, with knowledge and skills that were acquired through years of education. In 20 years, those same children that receive little or no proper education, many of whom are female, will wonder why we allowed them to slip through the cracks. Without access to proper education, their future opportunities are dramatically limited. Schooling unlocks the gate to a bright and successful future; a childhood bereft of education erects nearly insurmountable barriers. Education promotes civic engagement and is essential for democratic governance. Every university in the world can easily cite projects in which engagement with the community builds better towns and cities, while students learn valuable lessons for life and work, becoming better citizens and custodians of what they inherit. At no time is organizing educational infrastructure more important than immediately after a natural disaster.

Wx Risk Global's financial weather products can also provide much needed funds, in the aftermath of weather-related disasters, to rebuild educational infrastructure. This is one of the most basic elements necessary to ensure access to education.

School classrooms are the most common place in which structured learning takes place with groups of children. While learning also takes place in a variety of different types of spaces; tents, temporary shelters, shade of trees, places of worship, people's homes, and so on—families and communities expect formal education to take place in classrooms that have been designed for safety and with the intent of learning.

Wx Risk Global is deeply committed to creating a world in which all children, regardless of their gender, socioeconomic background, geography or circumstances, have access to free, compulsory and quality education.

### [Access to Energy](#)

Wx Risk Global's Weather Risk Product Solutions can be structured to provide funding for supplementary energy costs during instances of excess Heating Degree Days (HDDs) and Cooling Degree Days (CDDs) or when renewable energy supplies are insufficient. They can also incorporate commodity index pricing volatility into potential market solutions. This increases energy and fuel efficiency and an environment that can depend on more sustainable/renewable energy sources.

In the US, despite the fact that nearly all Americans have access to reliable energy, many states have discontinued laws that allow for residential renewable energy users to sell their excess electricity to electric companies. Weather risk product solutions can replace this lost revenue stream.

Energy powers the world's economic engine. From the perspective of jobs, security, climate change, food production or increasing incomes, access to sustainable energy for all is essential in

strengthening economies, protecting ecosystems and achieving equity. The World Bank reports, “More than about 1 billion people around the world still live without the access to energy”. Another 3 billion cooks or heat their homes with polluting fuels like wood or other biomass, resulting in indoor and outdoor air pollution that causes about 4.3 million deaths each year.” These emissions are also important drivers of climate change and local environmental degradation.

Reliable electricity is essential to powering emergency medical equipment, storing blood and vaccines, and performing basic health procedures, especially after dark. Without it, pregnant women must deliver their babies by candlelight or are unable to undergo an emergency cesarean section at night. Children do not have access to life-saving vaccines or critical emergency care. Women do not have full access to vital pre- and post-natal maternal health care services.

Wx Risk Global’s weather risk products are designed to ensure the rebuilding and strengthening of the impacted area’s energy infrastructure after a devastating weather event. Wx Risk Global is deeply committed to “Sustainable Energy for All”, (SEforALL). The company also supports a public-private partnership encouraging the development of clean energy mini-grids, which seek to deliver utility-grade electricity to areas not served by the conventional power grid.

### [Access to Financial Services](#)

Wx Risk Global is providing organizations access to AAA-rated financial institutional/services as it pertains to weather risk products. These weather risk products provide organizations seeking to offset the expense from devastating weather events with access to capital to shore up infrastructure including financial systems.

Access to finance is the ability of individuals or enterprises to obtain financial services, including credit, deposits, payments, insurance, and other risk management services. Those who involuntarily have no or only limited access to financial services are referred to as the *unbanked* or *underbanked*, respectively. Accumulated evidence has shown that financial access promotes growth for individuals and enterprises through the provision of credit to both new and existing businesses. It benefits the economy in general by accelerating economic growth, intensifying competition, and boosting demand for labor. The earnings of those on the lower end of the economic ladder will typically rise, which in turn, reduces income inequality and poverty. The lack of financial access limits the range of services and credit for households and enterprises. Impoverished individuals and small enterprises need to rely on their personal wealth or internal resources to invest in their education and businesses, which hinders their full potential and leads to the cycle of persistent inequality and diminished growth. None of this is more important to communities than after an extreme weather event.

Wx Risk Global’s weather risk products can provide organizations with the capital necessary to provide these financial services to areas affected by extreme weather events.



### Agricultural Productivity

Wx Risk Global's weather risk product solutions can supplement losses when crop yields are less than optimal. Agricultural productivity is dependent on ideal weather conditions. It is measured as the ratio of agricultural outputs to agricultural inputs, therefore allowing commodity indices to be incorporated into these products. This output value may be compared to different types of inputs such as labor and land (yield).

Agriculture and aquaculture are highly dependent on the seasonal climate. Increases in temperature and carbon dioxide (CO<sub>2</sub>) can alter climate and thereby decrease some crop yields or kill/disease certain species of fish and shellfish. The increased frequency and severity of droughts and floods pose challenges for farmers and ranchers and threaten food safety. In addition, warmer water temperatures are likely to cause the habitat ranges of many fish and shellfish species to shift, which could disrupt ecosystems. Overall, climate change alone could make it more difficult to grow crops, raise cattle and catch or farm fish utilizing our current methods.

The impacts of climate change also need to be considered along with other evolving factors that affect agricultural production, such as changes in farming practices and technology. Technological advances and agricultural efficiency promotes more sustainable land use.

Wx Risk Global's weather risk products can ensure agricultural productivity resumes promptly after adverse weather events, as well as everyday use of these products as add-ons to agriculture inputs that protect farmers from seasons of unfavorable weather. Much as the farmer purchases pesticides and fertilizers to promote crop health, so should he purchase derivatives for crop preservation.

### Capacity Building

Weather risk product solutions increase access to more immediate funding to survive, adapt, and/or thrive as weather becomes more volatile due to the effects of a warming planet. Assisting citizen groups, non-profits, NGO's, and local and state governmental agencies to protect against financial hardship, as a result of extreme weather events, is at the core of Wx Risk Global's principles and mission.

Capacity building is the process by which individual and organizations obtain, improve, and retain the skills and knowledge needed to do their jobs competently. Capacity building and capacity development are often used interchangeably. Capacity development recognizes existing capacities which require improvement. Community capacity building leads to infrastructure development that focuses on understanding the obstacles that inhibit people, governments, international organizations and NGO's from realizing their development goals while enhancing the abilities that will allow them to achieve measurable and sustainable results. The term community capacity building emerged in the lexicon of international development during the 1990s. Today, "community capacity building" is included in the programs of most international



organizations that work in development, such as, the World Bank, the United Nations and non-governmental organizations (NGOs) like Oxfam International.

Wx Risk Global is deeply committed to providing the communities, businesses and philanthropic entities it serves, with opportunities through connectivity, collaboration, trust, and a sense of community in each organization we assist. After an extreme weather event, Wx Risk Global's weather risk product solutions assist community-based organizations by providing the capital necessary to bring order to chaos.

### [Human Rights Protection or Expansion](#)

Wx Risk Global's weather risk product solutions can be the difference between peace and chaos in the wake of an extreme weather event.

Human rights are one of the most delicately balanced issues in areas often affected by extreme weather. The term "human rights" was mentioned seven times in the UN's Founding Charter, making the promotion and protection of human rights a key purpose and guiding principle of the Organization. In 1948, the Universal Declaration of Human Rights brought human rights into the realm of international law.

After an extreme weather event, Wx Risk Global provides capital necessary to focus on the health and safety of those affected. This alone can be the difference between a peaceful rebuilding process and a violent, chaotic period where human rights cannot be protected. Wx Risk Global is committed to respecting the UN Declaration of Human Rights and have several structured products that provide an opportunity for preservation of order in the aftermath of a catastrophe.

### [Community Development](#)

The very nature of Wx Risk Global's mission, is the development of communities and effective acquisition and allocation of our client's resources. All aspects of Wx Risk Global's business model represent the interests of the communities our client's organization serves.

The United Nations defines community development as, "a process where community members come together to take collective action and generate solutions to common problems". It is a broad term given to the practices of civic leaders, activists, involved citizens, and professionals to improve various aspects of communities, typically aiming at building stronger and more resilient local communities. Community development is also understood as a professional discipline, and is defined by the International Association for Community Development ([www.iacdglobal.org](http://www.iacdglobal.org)), the global network of community development practitioners and scholars, as "a practice-based profession and an academic discipline that promotes participative democracy, sustainable development, rights, economic opportunity, equality and social justice, through the organization, education and empowerment of people within their communities...". Community development seeks to empower individuals and groups of people with the skills they need to impact change within their communities. These skills are often created through the formation of social groups working for a common agenda like many of Wx Risk Global's clients.



Community developers must understand both how to work with individuals and how to affect communities' positions within the context of larger social institutions. In the context of a weather-related event, Wx Risk Global's weather risk product solutions provide our clients, who are focused on communities, to achieve their goals and serve their agendas to maintain and rebuild communities after severe weather-related events.

### [Income / Productivity Growth](#)

Wx Risk Global's weather risk product solutions are used to provide expense control, revenue protection, and budget certainty by mitigating and eliminating financial uncertainty due to weather volatility. The result of this increase in efficiencies is long-term productivity and income growth.

Wx Risk Global has worked with non-profit and for-profit businesses for years helping them to develop strategies, funding plans, and socially responsible programs. However, non-profits struggle to gain the resources they need, and businesses and people attempt to understand the needs of the community and how they can help when adverse weather strikes. One reason we created Wx Risk Global is simply to make it easier for businesses and people to give back to communities that are important to them, especially in times of need. Wx Risk Global's model for our client's community engagement promotes economic growth through expansion of employment and creation of new income and wealth, after weather-related events.

Economic growth promotes prosperity and without it, there will be no new residential or commercial development within communities. Economic growth is widely understood to have substantial benefits and is vigorously pursued by all levels of government as they recognize that growth creates new and improved jobs, higher incomes, a stronger local economy and tax base, and a more vibrant community. New economic development helps finance improved community services and significant benefits that contribute to a better quality of life for all. Too often, growth is viewed from a negative perspective.

Productivity is the total amount of output (or income) generated in an average hour of work. As such, growth in an economy's productivity provides the potential for raising living standards over time. A large part of giving is the creation of employment opportunities through the funding of projects and philanthropic initiatives.

Wx Risk Global believes strongly in the rebuilding of communities affected by weather events, and the growth and greater prosperity through their weather risk product solutions. Wx Risk Global is committed to working with business and community leaders to promote collaborations in tackling all complex socio-economic issues that arise after an extreme weather event occurs.

### [Equality & Empowerment](#)

Exposure to weather risk is unequally distributed to the socioeconomically disadvantaged. Wx Risk Global aims to establish weather risk product solutions to the benefit of the



socioeconomically disadvantaged. In doing so, they will reduce their exposure and the overall weather risk market will increase its diversification.

Wx Risk Global is more than 50% owned and operated by women and minorities, qualifying it as a Disadvantaged Business Enterprise (DBE). Wx Risk Global's example of doing well by also doing good is a strong indicator to the minority community at large, and conceptually provides motivation for other businesses to incorporate charitable giving into their business models.

Wx Risk Global is committed to all community philanthropic initiatives, including many of our client's initiatives that promote business opportunities for lower income and minority communities. According to SBA's Office of Advocacy, 99.7 percent of all employer firms are classified as "small businesses (less than 500 employees);" small businesses employ 51% of all people; have generated nearly two-thirds (64%) of net new jobs over the past decade and a half; and produce 13 times more patents per employee than large patenting firms. However, in most public conversations and in most people's minds, the important players in the economy are the large corporations – which only account for .03 percent of all firms and employ fewer people than small businesses do in total. This research illuminates the economic reality and calls for changing the conversation at a policy level and in the public sphere.

Wx Risk Global, being a DBE also has progressive policies on hiring and employing women and minorities. The positive effect of empowering women and achieving gender equality requires intentional actions and deliberate policies. These policies are based on concrete business practices and have inspired companies around the world to tailor existing policies and programs or establish needed new ones – to realize empowerment by women and minorities. The Wx Risk Global management team is committed to the following initiatives:

- ❖ Measure and report on women in leadership roles
- ❖ Require men and women to be on interview panels
- ❖ Roll out parental leave that gives fathers and parents of adopted children the same amount of leave as mothers (provided they are the primary caregiver)
- ❖ Roll out healthcare benefits to cover same sex partners
- ❖ Aim for minimum 40% of female vendor representation on their vendor panel

### Food Security

Wx Risk Global's weather risk product solutions, essential in developing countries, can subsidize food shortages after a flood or drought; allowing entire communities the ability to obtain food and goods they need immediately. Food security, as defined by the United Nations' Committee on World Food Security, "...is the condition in which all people, at all times, have physical, social and economic access to sufficient safe and nutritious food that meets their dietary needs



and food preferences for an active and healthy life”. When a weather-related disaster strikes, a primary focus is on food security and distribution of food supplies.

Wx Risk Global’s financial weather products provide the critical funds to insure this necessity for any and all affected by extreme weather-related events.

### Health Improvement

The impact of weather volatility and catastrophic weather events are some of the leading causes of poor health due to the spread of diseases and infections. Volatile weather has been linked to an increased in the numbers of reported diseases. Mosquito-borne illnesses like West Nile Virus, are just one example of this. According to Aileen M. Marty, M.D., infectious disease expert and professor at Florida International University’s Wertheim College of Medicine, “The impact of climate change on the spread of vector-borne disease has been of great concern”.

Wx Risk Global’s product solutions can be used to provide supplemental funding for increased disease control.

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## Sustainability

### Energy & Fuel Efficiency

Wx Risk Global’s weather risk product solutions provide a source of capital to maintain fuel reserves, and upgrade fuel delivery and energy generation systems after an extreme weather-related event. Our clients can provide tremendous advancements and additional efficiencies during and post rebuilding. Burning fossil fuels such as gasoline or diesel contributes to a number of environmental problems, such as air pollution (smog) and the release of CO<sub>2</sub>, which is responsible for global climate change. In addition, spills from refining and transporting oil and petroleum products damage ecosystems and pollute groundwater and streams. Almost all of the cars and trucks currently driven run on fuels derived from oil. Oil is a non-renewable resource, and while there is some debate as to how long this resource will last, we will eventually have to find new ways to power vehicles, generators and equipment.

Wx Risk Global believes in renewable energy sources and is committed in assisting all our clients in rebuilding using the most efficient energy solutions.

### Natural Resource Conservation

Conservation of natural resources is now usually embraced in the broader conception of conserving the earth itself by protecting its capacity for self-renewal. Particularly complex are the problems of nonrenewable resources such as oil and other minerals in great demand. The importance of reconciling human use and conservation beyond the boundaries of parks has become another important issue.



WX Risk Global's Weather Risk Product Solutions when properly applied to any weather related event or investment strategy by nature promotes the balance of natural resource conservation. Enabling both commerce and conservationists to maintain their agendas.

### Pollution Prevention & Waste Management

Wx Risk Global's weather risk product solutions provide capital resources after an extreme weather-related event.

Two important issues everyone confronts after a catastrophic event are clean drinking water and sanitation/waste management. Clean water is an essential element for human health, well-being and prosperity. Whether used for drinking, cleaning, food preparation or industrial output, access to sufficient water resources is a basic human need. Sufficient and safe sanitation facilities are also vital for hygiene, disease prevention, and human health. The World Health Organization (WHO) contributes the correlation between contaminated water and lack of access to sanitation to poor health, high mortality and increased poverty: "Contaminated water can transmit diseases such as diarrhea, cholera, dysentery, typhoid, and polio". Astonishingly, "By 2025, half of the world's population will be living in water-stressed areas".

Wx Risk Global's financial weather products provide those most in need, with the capital to replace contaminated water sources quickly, as well as rebuild existing infrastructure and in many cases upgrade or build new resources to enhance efficiencies.

### Sustainable Energy

Wx Risk Global is intent on structuring contracts for sustainable energy. For the wind and solar industries, the weather variables of concern are the wind speed and the quantity of sunshine that is being generated during a given time period. These wind and solar derivatives would be used to hedge weather-related production risk. In other words, the risk that the quantity of resource during the contract period will fall short of that needed to generate power, and thus negatively affect revenues. So, if the wind farm underperforms because of a streak of windless days, or sunlight is limited due to cloud cover and precipitation, a derivative contract could potentially compensate in the event that production dips below the level that is necessary to generate a profit.

### Water Resource Management

Financial Weather Risk products can be used to improve the distribution and managing of water resources, such as in irrigation districts with no water markets and multiple cropping seasons. Dry-season production depends completely on irrigation, while wet-season production depends on irrigation as a supplement to naturally occurring precipitation. These index-based weather solutions can fund the interseasonal reallocation of water from wet to dry season, generating new water allocations that improve the overall welfare among agricultural producers. Conversely, in the event of too much precipitation in the wet season, payouts can cover the expenses related to lost production from flooding. They essentially serve as a substitute for water which, in turn, allows the improvement of water allocation decisions from wet-season to



dry-season production. They assure the wet-season producers will generate normal crop yields or receive a monetary reimbursement during droughts.

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## **Conclusion**

After careful consideration and documentation, Dagda Certifies that WX Risk Global is a Socially Impactful and Sustainable company. Based on the GIIIN standards met above, outlining the widely varied and impactful outcomes possible from each weather event and subsequent payouts to affected regions.

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