



The Appropriate Technology Collaborative

Opportunity by Design



ATC Annual Report 2018

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Chief Executive Officer

Monika Noline Goforth

CEO and Guatemala Programs Director



Dear ATC Supporters,

We celebrate 2018 to mark our 10th year of appropriate technology design and development – an intercultural collaboration between USA and Guatemala!

Aside from designing technologies, our projects sensitize the public about important solutions to climate change and poverty.

We promote green technologies with hands-on workshops and access through local markets to help people transition to solutions that increase their family's health and economy. As more green solutions are recognized and valued, individual uptake accelerates exponentially independent of nonprofit assistance.

Already the word is spreading, we receive requests from neighboring communities that see our work in action.

That's how we met the members of the women's dehydrator cooperative in Quixaya. We work with them to experiment on the dehydrator, develop standard recipes and learn business skills. This year the cooperative has begun drying herbs and fruit to produce unique herbal teas to sell in the local market.

Upon the eruption of Volcán Fuego on June 3rd, we met with affected communities to understand the situation and execute an emergency response that would serve these people. We avoided rampant corruption and garbage waste by delivering water filters and solar lamps directly to heads of families.



Founder and Chief Innovation Officer

John Stanton Barrie

Creativity, Innovation and Expansion are the hallmarks of 2018. Listening to women in Quixaya Guatemala we found great strength in their capacity and desire to create a business that would help them provide for their families and create new sources of income for their families and community. Through a series of workshops ATC supported the women of Quixaya as they developed a cooperative based on our solar dehydrator design. Our solar programs continued to supply solar power and LED lights to thousands and we started to work with Departmental Governments (like States in the U.S.) to determine how we could best support development in Western Guatemala.

Our Guatemala program is strong and growing under the guidance of our new Executive Director, Monika Goforth.

I have taken the position of Chief Innovation Officer and I am now focused on our new programs in Detroit, Highland Park and soon Ypsilanti Michigan. In 2018 we taught our first solar classes with the Black Caucus Foundation of Detroit, and the Boys and Girls Clubs of Highland Park. The students in these classes were inspiring. We learned a lot about sustainability, solar power and each other. All ATC solar classes are STEM intensive and have lots of hands-on opportunities to really learn how to install solar power systems.

I look forward to expanding our Detroit Solar program to more after school and summer programs and to provide solar training in adult education and re-entry programs.

THE ATC MISSION

OPPORTUNITY BY DESIGN

The Appropriate Technology Collaborative creates technologies and programs that provide opportunity and dignity for the world's poor. ATC works in collaboration with our clients to create programs that are culturally sensitive, environmentally responsible and locally repairable in order to improve quality of life and reduce adverse impacts on the environment.





**NEW
WATER SUPPLY
FOR A VILLAGE
OF 4,500**

OUR PURPOSE

To innovate sustainable solutions to poverty.



OUR VISION

To create a world where everyone has opportunity and dignity

ATC BOARD OF DIRECTORS

Board Of Directors



Carl Patrick
Chair

Carl Patrick is an author, business consultant, and sustainable food enthusiast. Carl provides business guidance to ATC and access to community resources.



James Herbin
Vice Chair

James has a BSE Degree from the University of Michigan. He is a Software Developer MSCI Inc. James' background and work experience help guide ATC technology development.



Ethelia Brown
Treasurer

Ethelia has an MBA from Lawrence Technical University. She recently retired from GE where she was lead for Network Access Control.



Hemdeep Dulthummon
Secretary

Hemdeep has degrees from Queensland University. He is Senior Project Manager, Robotics Systems for Encore Automation.

ATC BOARD OF DIRECTORS AND STAFF

Board Of Directors and Staff



Diana Wong Ph.D

Member

Diana is an Associate Professor of Entrepreneurship at Eastern Michigan University as well as CEO & President of Sensei Change Associates, LLC



Christina Watson

Member

Director, Computer Service, GE Healthcare, Infrastructure management supporting 120 applications, 8000 servers globally, directing staff in 8 international locations.



Marilena Choguaj Rosales

Empowerment Trainer

B.A. Social Work, 2010. 10 years' experience creating curriculum and teaching women's empowerment.



Julio Rocop

Business Trainer

ATC Guatemala Administrator, B.S. Legal Sciences 2013; CPA & Auditor, Business and NonProfit Management 1997 - 2012, Doctors Without Borders and Engineers Without Borders.

ATC STAFF

Board Of Staff



Vincente Cuc

Construction Educator

Construction and Natural Building Educator. Guatemala program. Experienced Bamboo, Bajareque, Adobe and hybrid construction.



Jose Ordonez

Solar Design and Educator

B.A. Industrial Technology; MIT Development Summit, Ghana, 2009 Solar Energy International Certified, Volunteer coordinator for ATC International programs.



Nathaniel Steinrueck

Bamboo and Furniture Construction

Adjunct Professor of Architecture, Green Mountain College. Furniture design, Natural Building, Technology Design and ATC Project Manager.



MJ O'Brien

Detroit Solar Project Manager

B.A. Music & Business, Wilfred Laurier University, Ontario CA. Project Manager Construction for Change, Togo West Africa and The Dominican Republic.



ATC — Our History



ATC HISTORY AND TIMELINE

Our History Timeline

First Solar LED Light Circuit Design First Solar Light Prototype First Community Meeting to Discuss Appropriate Technology	<	2007	
		2008	>
			First Solar LED Light Installation ATC Director wins Boston Innovation Prize ATC Incorporates and Receives 501(c)3 Nonprofit Status
“Innovate, Energy for the Developing World”, Sierra Mag. Design and Prototype of Solar Vaccine Refrigerator, Edison Prize, 2009, Solar Vaccine Refrigerator	<	2009	
		2010	>
			“Collaborative Design Strategies”, New America Foundation, November 2010 Bluelab Woven Wind Begins Design in Guatemala
“Students Without Borders” Feature Article, Michigan Engineer, Fall 2011 ATC wins Amgen award for teaching Solar Design	<	2011	
		2012	>
			Woven Wind Wins 2012 Dell Social Innovation Award ATC Installs Solar Power on Technical School in Guatemala First “Circuits and Solar” class taught in Guatemala

ATC HISTORY AND TIMELINE

Our History Timeline

<p>ATC + Woven Wind win IBM “Smarter Planet” Challenge First ATC Boy Scout Volunteer Trip ATC Volunteers Install Solar on rural Tzanjomel school</p>	<	2013	
		2014	> <p>ATC Volunteers Build \$600.00 Bamboo House ATC and Michigan State Design UV Water Sterilization Girl Scout Volunteers Install Solar Power at Coffee Coop</p>
<p>Prototype Generator Made 100% from recycled parts Design and Test Prototype Amaranth Winnower Teach “Circuits and Solar” at the University Mesoamerica</p>	<	2015	
		2016	> <p>The UN Recognizes ATC as Top 100 Sustainable Enterprise Mayan Power and Light Reach Over 10,000 people ATC Nicaragua Project MESA Wins \$25,000 Ford Grant</p>
<p>Project MESA, U of M Socially Engaged Design Award ATC Installs First Solar Rural Computer Lab ATC Teaches Solar and Installs Solar Power at Rural School</p>	<	2017	
		2018	> <p>ATC Fast Response to Emergency Volcano Eruption ATC Initiates Prosperity Plan for Volcano Victims ATC Starts Detroit Solar and Green Jobs Pilot Program</p>



2018 HIGHLIGHTS

Opportunity, Dignity, Hope



HIGHLIGHTS 2018

The Year At A Glance

01

Maker Works - USA

ReDesign of Solar Vaccine Refrigerator

Our Solar Vaccine Refrigerator has been credited with saving millions of lives. We can make it better. An Ann Arbor Volunteer Engineering Team is helping with both design and CAD drawings.



02

April – Tiritibol, Guatemala

Solar Powered Solar + Computer Lab

ATC, Volunteers and the community of Tiritibol, Guatemala install solar power on their school and install a computer lab with donated laptops from ATC partners in USA.



03

December – Highland Park, USA

Teaching Solar in Detroit

ATC and collaborative partners teach about electricity, circuits and solar power in Highland Park and Detroit Michigan.



HIGHLIGHTS 2018

The Year At A Glance



04

August – Highland Park, USA

Hands On Solar Installation

Both the Black Caucus Foundation of Michigan and the Boys and Girls Clubs of Highland Park learn hands-on how to install solar power.



05

February – Santa Isabel, Guatemala

Community Solar Demonstration

ATC installed solar power on the community building at the isolated village of Santa Isabel with James Madison University students.



06

February – Santa Isabel, Guatemala

Greywater Santa Isabel

We installed a greywater system at Santa Isabel's community washing station with James Madison University students.



HIGHLIGHTS 2018

The Year At A Glance

07

June - Volcano Fuego, Guatemala

Rapid Emergency Response - Solar

Quick & effective emergency response to Volcano Fuego eruption was matched with transparency and direct donations to reduce donation theft. Each family signed for their solar lamp or water filter.



08

June – Volcano Fuego, Guatemala

Clean Water For Survivors

We responded to the Volcano Fuego eruption with sustainable clean water solutions. 5 Water Filtration Workshops trained over 200 people to use new filtration technology.



09

June – Volcano Fuego, Guatemala

Emergency Community Solar Power

We helped create an emergency response plan for villages on Volcano Fuego identifying 'safe houses' for where community solar powered lamps can charge cell phones so people can call for help.



HIGHLIGHTS 2018

The Year At A Glance



10

Quetzaltenango, Guatemala

Marilena Choguaj

Marilena Choguaj joined us full-time to lead Mayan Power and Light empowerment & entrepreneurship education. She brings 10 years experience in women's empowerment to our programs.



11

January – Ann Arbor, MI USA

Circuits and Solar

ATC Michigan began teaching Circuits & Solar at MakerWorks, creating our new fee-for-service program.



12

Maker Works, Ann Arbor MI USA

Plastics Recycling

We built proof of concept and prototypes of plastics recycling machinery that can provide jobs in small scale recycling and materials re-purposing businesses.





ATC IMPACT

Solar Power, Social Ventures, Design Innovation



20

Men and women learn how to preserve food and earn extra income with ATC solar food dehydrators.





43

People in 43 countries have reviewed, prototyped and built our innovative and life changing designs.





272

Children attend ATC funded schools with computer labs donated by **you**, our generous supporters. **Thank You!**





3,302

People have access to safe water after Volcano Fuego erupted and destroyed hundreds of homes, schools, villages and farms.

Without water there is no life.





100%

Signed documents showing they received water filters and that they will provide clean water in case of a future emergency.





35,934

People have benefited from our programs and technologies world-wide since 2008.





4,000,000

Pounds of Carbon Dioxide Abated Every Year By ATC Technologies and Programs.





10 Years of Cross Cultural Partnerships

ATC INCOME & EXPENSE, USA, GUATEMALA & SOCIAL VENTURES

Figures in US dollars

	Appropriate Technology Collaborative	SEA Solar	AEIDS Guatemalan Nonprofit	Total
2018 Income				
Donations and Grants	\$109,652.82		\$5,583.63	\$115,236.45
Sales & Services	\$912.04	\$26,674.52		\$27,586.56
Material Donations	\$4,255.00 (value)		\$600.00	\$4,855.00
Volunteer Donations	\$15,279.00 (value)			\$15,279.00
2018 Subtotals	\$130,098.86	\$26,674.52	\$5,583.63	\$162,957.01
2018 Expense				
Program Support	\$80,292.25			\$80,292.25
Overhead	\$24,360.00			\$24,360.00
Other Expense	\$2,652.00	\$23,816.54	\$5,579.53	\$32,048.07
Total	\$107,304.25	\$23,816.54	\$5,579.53	\$136,700.32

Note: A portion of AEIDS income was provided by ATC