



**1421 Miracerros Loop S., Santa Fe, NM 87505, USA etechinternational.org
Director: 610 Pebble Drive El Sobrante CA 94803 USA Tel. 505.670.1337**

December 24: E-Tech Annual 2021 Report and Solicitation of support. Dick Kamp, Director

Hi and welcome to our 2021 annual letter from E-Tech as we continue our mission of providing scientific and technical environmental support to communities in developing countries who request it; largely Latin American and indigenous, facing actual and potential environmental and human rights devastation from large-scale industry (mostly extractive industries). We see ourselves as a Covid-era mishmash of the Peace Corps and a skilled technical tool for these communities.

In addition to news of work in Peru, Ecuador, Mexico, and a bit in Uganda, I want to discuss some complex changes in who we are as a nonprofit and how we are trying to morph and evolve.

Peru: This new process has begun in Peru, where we work with reduced foundation support while on a practical path to achieve a goal defined five years ago of supporting four indigenous Amazonian Federations to achieve financial stability and environmental rehabilitation and remediation of their territory following petroleum devastation of their forest territory.

In my mind we are at a place that's remarkable for a tiny New Mexico-based NGO such as ours and it reflects indigenous will and a lot of sweat from our Peruvian allies and ourselves. Covid variant uncertainties such as Omnicron have made it even more important that we can work with varying funds and in-country partners whom we trust as we puzzle over how to travel very judiciously. We are trusted; our weird intelligence, intuition and long-term dedication is trusted, however it has always been our goal to see that work is done by others and especially amidst the existence of parasite viruses that will continue to evolve as one of many elements of climate change.

Our long-time supporter, the MacArthur Foundation, has terminated their conservation program and we were one of the last grantees. The Full Circle foundation, has stepped in to partially cover their loss. Concurrently, in December we became the larger part of a brand new Peruvian legal consortium to begin a project-- demanded by the four Federations in the Loreto Amazon Basin--to lay out a long-term road map to resilient financial stability to be trained as skilled environmental consultants to remediate and rehabilitate their own territory ultimately cleaning up hundreds of polluted sites spread out over 2500 square miles of the Amazon basin. Rehabilitation will mean choosing means to utilize and sustainably reforest and revegetate their territory for artisanal self-reliance and small scale hunting, fishing and agriculture and as a carbon sink implicitly.

E-Tech is a US NGO (not a legal Peruvian nonprofit because we want to work with for-profit experts as well as nonprofits and academics). Our new consortium, Consorcio E-Tech-Conciencia Ambiental (COAM), joins us with a skilled for profit environmental consulting firm, a talented field coordinator,

attorneys and accountants in working intensely during 2022 to determine how indigenous communal businesses and environmental monitors can use governmental funds to receive high level skilled training to become environmental consultants in their own communities. Every Federation in 4 separate watersheds will have their own self-determined goals for how this training can be achieved. This was a project they demanded.

Funding for this road map—mostly not going to E-Tech personnel and relatively small-- is from government based environmental fund PROFONAMPE and uses money approved by Peruvian government ministries to respond to indigenous needs under laws passed by 2016 committing the government—five presidents later—to clean up crude oil pollution in the Amazon. To the credit of many Peruvians, in spite of changing faces and philosophies in ministries and ongoing oil spills during diminished fading oil exploitation, the process continues to crawl along like a determined turtle.

The Polluter Pays principle is difficult to apply legally in Peru. The regulatory framework has often allowed companies to walk away from toxic waste through approval of binding agreements that inadequately deal with the destruction left behind and in the Amazon basin this happens largely to indigenous communities. The government has agreed to find the means from the oil industry of remediating; the funds will be very inadequate however the process has begun.

E-Tech in coordination with the Federations and Puinamudt, their “platform” for action, first presented this concept in 2016 in Lima. We are, to say the least, proud to be doing this work which may be a many decade commitment. It will be a goal to expand this government funding and seek outside foundation sources to help as the years move forward and an increasingly Peruvian crew steps up to assist the communities to dominate their own cleanup and restoration of their culture. With some more legal work E-Tech can continue to work with these and other small governmental contracts.

I'll be blunt: the Peruvian model is both a means for E-Tech to survive with diminished foundation support and it is a means to bring in talent and strengthen environmental and human rights policy within the government while the government provides explicit support. We want badly to see it succeed. Non-profit/for profit consortiums could be applied in different ways in different countries and as we explore these possibilities we see it as a means for younger and dedicated and flexible environmental and human rights professionals, whether self-taught or PhDs, to continue with this work that has required dedication often amidst bad pay.

Meanwhile: E-Tech has continued with training and skill expansion of environmental monitors in the 4 watersheds. Here we also are bringing in more experts in different fields who have volunteered their skills in different areas such as spill response and GIS. In our last workshop in Iquitos in October jointly with indigenous Puinamudt; co supporters included UNDP and participants included PROFONAMPE and lots of volunteer professionals. We also have been conducting in-depth analyses with Federations of prior consultation over oil concessions and remediation of sites.

Photos below top and bottom: ***During October, 2021 E-Tech workshop supported also by UN Development Program, Federation environmental monitors practice producing videos. Monitors make videos of oil spills, remediation efforts, their own homes from their own perspective, and areas to preserve in their communities. During the workshops aside, from practical skill sessions such as emergency response, use of GIS and other tools, the monitors produce artistic renditions of whatever spiritual and cultural imagery they choose, such elements are key elements to rehabilitating their land and water per agreements with the national government as well as oil remediation or cleanup.***



Deepest gratitude to our visionary scientist Diana Papoulias, and to Mario Zuniga, Ricardo Segovia, Nina Swen, Evelyne Blondeel, Peter Rodriguez, Aymara Leon, PUINAMUDT, UNDP, new partners COAM, Walter Stucchi, Jose Luis Deza Guzman, Elliot Taylor, Renato Pita, Alison Hospina, Paxty Tananta, Omar Alfaro, Cliff Jones, and many others who are making this profound effort work for minimal money. I will project that monitor/communal business skills development is a 10 year project that needs to continue for at least 20 years whereas remediation-rehabilitation may take 50 years in a climate changed Amazon. Thanks to Full Circle Foundation, Swift, Lush, New England Biolabs Foundation and PROFONAMPE for moving this ahead and to the MacArthur Foundation for the past 12 years.

Ecuador: Since 2010 E-Tech has devoted much time and energy to address large-scale mining in Ecuador, particularly in the Cordillera del Condor in the south and with an emphasis on the large open pit ECSA Chinese copper mine, Mirador. The mine, in spite of grave concerns over tailings impoundments, internal mine rock and waste contamination, impacts on rivers and surrounding communities, occupational health and seismic risks, is operating under fast-tracked very inadequate and

probably illegal permitting. These concerns have grown quickly as the mine began operation and tailings dams and potential diversion of rivers created frightening short term scenarios for residents.

A sad part of this process was in 2016 when soldiers entered Shuar territory to assure mine operations going forward under Correa Presidency that resulted in indigenous defenders fighting back and escaping into the jungle. This invasion was preceded by many years of bitter struggle over what land had been considered stolen by indigenous communities.

Beginning in 2020 E-Tech, working with consultants, became a technical support for an Interamerican Human Rights Commission case that seeks to define the mine as being a source of imminent endangerment to those living downstream—largely indigenous Shuar and Saraguro communities--as well as potentially to workers and to those living in watersheds in Northern Peru.

Imminent endangerment is not a simple bar to meet; demonstrating endangerment to life and health and livelihood. We need substantially more information to evaluate than we have from the Ecuadoran government and quickly. We will participate in judicial inspections of the mine which will include representatives of the Ecuadoran Asamblea or senate. This will probably be in late January, 2022, with pandemic obstacles to travel a potential impediment.

IF successful, this case would require the Ecuadoran government to provide effective controls and preventative remedies to end Mirador imminent endangerment as a human rights settlement; the plaintiffs and E-Tech would want a transparent process that could be technically evaluated for effectiveness over the long term. Transparency is not the history in Ecuador where indebtedness to the Chinese dominates amidst a very weak economy.

E-Tech is using limited support from long-time supporter Swift Foundation and from Pachamama Ecuador; we will need more support to make this a long term successful effort with Ecuadoran allies.

We are hopeful and also remain unpaid visiting faculty of Geology and Oil Engineering at the Escuela Politecnica Nacional in Quito. The project has largely involved Ann Maest, Lupita de Heredia, Steven Emerman and Jim Kuipers, as consultants and myself with help from Ricardo Segovia and Evelyne Blondeel. Our gratitude to Mario Melo, Alicia Granda, Julio Prieto, Tarquino Cajamarca, Luke Danielson and many others.

Mexico: In August, 2014, the world's second largest copper deposit, the 150 year old Grupo Mexico Cananea, Sonora open pit copper mine, negligently spilled at least 11 million gallons of highly acidic acid leach solution into the Rio Sonora flowing south toward capital Hermosillo, Sonora. Thousands of lives were in upheaval along the river in dry tropical forest and desert and after several requests to help, E-Tech partnered with board member Laurie Silvan and her NGO Proyecto Fronterizo de Educacion Ambiental to address long-term social and environmental impacts along the river.

The result was the Independent Social and Environmental Rio Sonora Project (PSIRS in Spanish) consisting of nine independent academic and private investigators and NGOs plus external assistance from the National Water Commission (CNA).

Initially efforts were funded by Lush Cosmetics and largely local donations from the border region. (Lush still funds E-Tech in Peru).

Covid hit researchers hard as well as Lush, and local water quality sampling and analysis were halted; however local donations and largely a great deal of effort from the Sonoran team working with PFEA and E Tech continued limited field communication with towns along the river and the production in 2021 of a comprehensive report.

The report summarized water quality issues to date and provided recommendations for actions moving forward addressing mining and other forms of contamination. The team is looking at medium term Sonoran financial support for water quality and community capacitation and PSIRS is evaluating both how to work along the river and potentially whether the national government could support technical work to mitigate pollution impacts from the Cananea mine. E-Tech Chief Scientist Ann Maest, Laurie and I are committed to these efforts. Our thanks to Lara Cornejo, Hector Vega, Alex Nava, Antonio Romo, Antonio Romo, Ana Maria Perez Villalba, Jose Martinez (Chema), Cati Denman, Sandra Martinez, Bill Steen, Enrique Flores, Tim Spears, Hermes Nar and many others during 2021.

A little less solid looking ahead is our initial foray into responding to concerns from the Northern (Sonora) Jaguar Project jaguar conservation organization on both sides of the border to lithium mining development in southeast Sonora.

Lithium mining and processing will be a core of battery development in renewable energy for now until and if less rare minerals such as iron become a core ingredient. The mining tends to be on the large-scale size and open pit although due to deposits not as deep or large as copper mining. It is a subject of serious debate whether the Lithium is worth the exploitation in the name of mitigating climate change.

In addition to evaluating Sonoran mining development, potentially in coordination with the CNA water commission Ann Maest and I traveled to Nevada to evaluate Lithium America's controversial mine and processing along with Dr. Glenn Miller and had meetings with USGS and an independent exploratory geologist who has evaluated Sonoran and Nevada lithium deposits among many others. We came away with an orientation on the mining process.

However any further work on lithium mining is currently tentative and we will await further 2022 developments. Thanks to the jaguar project and to longtime friend and associate Diana Hadley, Glenn, Turtle, Carmina Gutierrez and Randy Young among many others.

Africa: E-Tech continues to regularly advise, and when we can find small donors, to financially support specific efforts to assist the Ngetha Media for Peace organization and local activist and sometime rural indigenous resident Agenonga Robert in addressing environmental, human rights and climate change impacts of development of the East Africa Oil Pipeline exploitation and delivery project (EACOP) in Uganda and the Albertine Rift.

Chief Engineer Bill Powers continues to actively work with other global organization on technical alternatives to EACOP as financed and planned and we have helped in starting revegetation projects and

more recently to power and develop a DCR Congo based radio station. We are deeply concerned over the violence and murders associated with this project in a country that is essentially a violent autocracy. Bill and I have been main participants in keeping up with Robert.

ALSO: Ann Maest and I are currently investigating the potential of working with Antwerp,Belgium-based International Peace Information Service- IPIS- regarding diamond mine water pollution in Angola and the Congo.

Other : E-Tech is currently in a collaboration funded by German NGO LINGO or “Leave it in the Ground” looking specifically at Mexican oil exploitation alternatives and other models globally.

We are forever thankful for the kind words, wisdom, and support of many not mentioned above: *Peter Kostishack, Ximena Warnaars, Frederica Barclay and Equidad, Tami Okamoto, Alfonso Lopez Tejada, Aurelio Chino, Carlos Sandi, Emerson Sandi (Apus-Federation leaders) and all the environmental monitors of the “4 Cuencas Amazonia Peruana”, Eliana Jimenez, Carolina Bernal, Alan Weisman, John Caulkins, George Heine, Barbara Ferry, Mica and Matt Tieman, Ray Galley, Tasha Pera, Charlie Bagby, Denise Fort, Rebecca Kroll, Annie McGreevy, Quentin Lewton, Bob, Estellean and Rosie Wick, Salvador Quishpe, Miguel Angel Gonzalez, Keoki Skinner, La Posada de Banamichi, Armando Sanchez, Jon Sohn, Holly Dressel, Chris Alan, Patricia Gay, Kate Barnes, Claire Poelking, Alejandro Argumedo, Enrique Medina, Garrett Brown, Pablo Duque, Tim Spears, Timmons Foundation, Denise Bebbington, Circles Robinson, Elektra, Phyllis and Reality Check, my daughters-- Lucy who regularly warns me not to transmit Covid when I travel—and Julia, Seri and Mica. Oh, and thank you Amazon Smiles.*

Errors and omissions are my own in this report. Have great holidays, Dick



Pass our news on to any interested parties. All the best!