



**LEAVES, A Newsletter of the  
INTERNATIONAL  
ENVIRONMENT FORUM**

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**International Environment Forum** A Bahá'í inspired organization addressing  
the environment and sustainable development

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### **From the Editor, Request for information for upcoming newsletters**

This newsletter is an opportunity for IEF members to share their experiences, activities, and initiatives that are taking place at the community level on environment, climate change and sustainability. All members are welcome to contribute information about related activities, upcoming conferences, news from like-minded organizations, recommended websites, book reviews, etc. Please send information to [newsletter@ief.org](mailto:newsletter@ief.org)

Please share the *Leaves* newsletter and IEF membership information with family, friends, and associates and encourage interested persons to consider becoming a member of the IEF.

### **New Officers for IEF**

After some delay since the election of the new IEF Governing Board, the board has re-elected Arthur Dahl as President and elected Christine Muller as its new General-Secretary. Christine is of Swiss origin but living in Rhode Island, USA. She has been active for many years in IEF, particularly in designing and teaching courses for the IEF and the Wilmette Institute on climate change and on sustainable development.

### **Members' Corner**

#### **New Members:**

We warmly welcome the following new members to the International Environment Forum:

Khela Baskett (USA)	Nizar Mohamed (New Zealand)
John Bradley (USA)	Gary Reusche (Ukraine)
Leslie L. Gottert (USA)	Ramin Raymond Rohani (USA)
Tiyamike Mkanthama (Malawi/Costa Rica)	

We look forward to getting to know you better and invite your active participation with IEF!

#### **Lost and Found Members**

The International Environment Forum has been up-dating its membership directory and e-mail list. Many e-mails have bounced back, but we are glad to report that we could reconnect with 16 "lost" members! In the process, we also learned that IEF member Dwight Kimsey, from Northglenn, CO, USA passed away four years ago at the age of 84.

**We are still looking to find the contact information for the members listed below.** If you know any of them, please, ask them to send their current e-mail address to [ief@iefworld.org](mailto:ief@iefworld.org)

**Argentina**

Carlos Alberto Musfeldt, Buenos Aires

**Australia**

Helen Saba, Lower Hutt (New Zealand or Australia?)

Sadia Niyakan-Safy, Trinidad, W.I., Trinidad (now Australia)

Phil Morley, Roseworthy, South Australia

**Canada**

Shirley Barr, London, ON

Ken Dunsworth, BC

Leili-Ana Egea Farzannejad, Toronto, ON

Diana Frost

**India**

Shakti Prakash, New Delhi

**Malaysia**

Crawford Prentice

Yow Peng Leong

**Netherlands**

Marjorie Barbara Schreuder

**New Zealand**

Anton ten Houten

Robert McLaughlin, Sharps, Virginia

Michelle Dawson

**Singapore**

Patty Yunita Odier

**Slovakia**

Tomas Linsel, Kosice

**Switzerland**

Eva Leuthe

José Maldonado

**UK**

Ismail Ali

Hanna Margrét Snorradóttir

Marion Nowicki

Abbas Ali Elmualin

Amanda Filipe

**USA**

Roshan Cholas

Heather Megan Fuller, Brierfield, Alabama

Owring Kashef, Florida

Kenley Mays, Lynchburg

Christina Simokat, Encinitas, CA

Tom Hodges, Beaverton OR 97005

Katia LeMone, Radium Springs, NM 88054

Whitney Judd, Arizona

## Education for sustainable, responsible living

IEF has long collaborated in the Partnership for Education and Research about Responsible Living (PERL), founded by IEF board member Victoria Thoresen and based at Inland Norway University of Applied Sciences. PERL is developing a new series of compilations of "good practice" concerning education for sustainable, responsible living. Should any IEF members have short descriptions (+photo+webpage) of any relevant practices/activities/projects, they are welcome to send them to the Centre for Collaborative Learning for Sustainable Development (CCL) at [ccl@inn.no](mailto:ccl@inn.no). For your information, UNESCO will be holding a World Forum on Education for Sustainable Development and Global Citizenship Education in Hanoi, Vietnam, the first week of July 2019. The focus will be on values, lifestyles and early childhood education.

## Opportunities for involvement in an international development project with projects in Indonesia, Senegal and India

Members of the International Environment Forum were heavily involved some years ago in the design and implementation of the Values-based Indicators of Sustainable Development project (<https://www.brighton.ac.uk/research-and-enterprise/groups/values-and-sustainability/esdinds.aspx>) at the University of Brighton, UK, which developed the WeValue methodology (<http://blogs.brighton.ac.uk/wevalue/>). IEF partnered in the conference launching the results of the project as its 14th Conference in 2010 (<https://iefworld.org/conf14.html>). The research has progressed and new significant funding is now available to apply the WeValue approach in international development projects. The announcement below describes some of those opportunities.

## Shared-Values Research Opportunities

- i) **A variety of casual or part-time jobs** in Indonesia, India and Senegal (probably Dakar, Hyderabad, and Jakarta respectively). Might include facilitating workshops; transcription and/or translation into English; analysis of interviews; summarizing research.
- ii) **Volunteer opportunities in Indonesia, India and Senegal** (probably Dakar, Hyderabad, and Jakarta respectively). These could involve working alongside international researchers, and/or national level researchers; community development research participation; possible training in specialized shared values approaches.
- iii) **PhD opportunities** (3-5 years) based in Shanghai, China at a top-200 world class university (Fudan). Application deadlines are late February each year. All work is in English.
- iv) **Postdoctoral positions** (2 years) in Shanghai, China at a top-200 world class university (Fudan). There are no specific deadlines. All work is in English.

If you are seriously interested in any of these potential opportunities, then please email Professor Harder at [m.k.harder@brighton.ac.uk](mailto:m.k.harder@brighton.ac.uk), mentioning where you obtained this information.

Professor Marie Harder is a Thousand Talents professor based at Fudan University 9/12 months of the year, and otherwise at the University of Brighton in the UK.

Her teams have spearheaded developments in values-based approaches since 2008, which are now being used in projects world-wide as a new generation approach to public engagement in international development, in sustainability with a social emphasis, in businesses and organisations, and in climate change adaptation planning. Early work is described on the website [WeValue.org](http://WeValue.org) and the publications listed there.

This work is now part of a global project on Action Against Stunting, funded by UK Research Councils, 2019-2024 and led by the London Institute of Development Centre. Although the core work is on stunting, the Values Approaches will provide intermeshing with the local values of the people on the ground – by helping them to crystallize their shared values better, before becoming involved in

the stunting work. This is the first use of WeValue for international development projects, and it is expected that there will be many more, which will require more trained persons.

The portfolio of the approaches, developed in a practice-based social design mode and known as WeValue, are being developed and studied by Prof. Harder's team from multiple viewpoints and for a variety of applications. There are currently projects looking at: the sub-processes and their links with theories from transformative learning, knowledge production, tacit knowledge, reflective thinking; the impacts and their links with community development, evaluation, sustainability indicators, community capacity building, articulation of local and authentic voice, and the paradox of universal lists. Design features are under development for improving transfer of the technique across languages and cultures, generalising the inner scaffolding so as to leave most of the process entirely localisable, reducing the complexity needed for a given purpose, and streamlining training and workshop materials including for non-literate users. Applications are currently in eliciting local shared values for robust representation to external development agencies for health and stunting, consolidating local voice and ownership for local climate adaptation plans, increasing the perceived relevance of education in Africa through consolidation of local shared values first, raising awareness of the value of diversity in a group, and bridging local social values into land remediation decision making tools.

If any of these interest you, or you are willing to learn about them to build your own new ideas, then please do consider applying to join us. Postdoctoral candidates should be interested and able to write in academic English comfortably, or willing and able to learn fast.

There will also be full scholarship PhD positions in China (including a stipend), and one based in the UK (the latter restricted to EU passport holders). Candidates must already have a master's degree, and be prepared to be based in Shanghai for 3-5 years with our team there, currently of 8 masters and PhD students, two research officers, two postdocs and one professor.

## U.N. Global Compact for Migration

IEF web site at <https://iefworld.org/node/9631>

Sources: <https://refugeesmigrants.un.org/migrationcompact> and <https://news.un.org/en/story/2018/12/1028941>

An Intergovernmental Conference was held on 10-11 December 2018 in Marrakech, Morocco where 164 UN Member States adopted the Global Compact for Safe, Orderly and Regular Migration. On 19 December, the United Nations General Assembly officially endorsed the Global Compact, described by UN chief António Guterres as a “roadmap to prevent suffering and chaos”. There were 152 votes in favour, 12 abstentions, and five votes against, namely by the Czech Republic, Hungary, Israel, Poland, and the United States of America. An additional 24 Member States were not present to take part in the vote.

The Global Compact for Migration is the first-ever UN global agreement on a common approach to international migration in all its dimensions. The global compact is non-legally binding. It is grounded in values of state sovereignty, responsibility-sharing, non-discrimination, and human rights, and recognizes that a cooperative approach is needed to optimize the overall benefits of migration, while addressing its risks and challenges for individuals and communities in countries of origin, transit and destination.

### The compact:

- **aims** to mitigate the adverse drivers and structural factors that hinder people from building and maintaining sustainable livelihoods in their countries of origin;
- **intends** to reduce the risks and vulnerabilities migrants face at different stages of migration by respecting, protecting and fulfilling their human rights and providing them with care and assistance;
- **seeks** to address the legitimate concerns of states and communities, while recognizing that societies are undergoing demographic, economic, social and environmental changes at different scales that may have implications for and result from migration;
- **strives** to create conducive conditions that enable all migrants to enrich our societies through their human, economic and social capacities, and thus facilitate their contributions to sustainable development at the local, national, regional and global levels.

The global compact comprises 23 Objectives for Safe, Orderly and Regular Migration for better managing migration at local, national, regional and global levels.

- (1) Collect and utilize accurate and disaggregated data as a basis for evidence-based policies
- (2) Minimize the adverse drivers and structural factors that compel people to leave their country of origin
- (3) Provide accurate and timely information at all stages of migration
- (4) Ensure that all migrants have proof of legal identity and adequate documentation
- (5) Enhance availability and flexibility of pathways for regular migration
- (6) Facilitate fair and ethical recruitment and safeguard conditions that ensure decent work
- (7) Address and reduce vulnerabilities in migration
- (8) Save lives and establish coordinated international efforts on missing migrants
- (9) Strengthen the transnational response to smuggling of migrants
- (10) Prevent, combat and eradicate trafficking in persons in the context of international migration
- (11) Manage borders in an integrated, secure and coordinated manner
- (12) Strengthen certainty and predictability in migration procedures for appropriate screening, assessment and referral
- (13) Use migration detention only as a measure of last resort and work towards alternatives
- (14) Enhance consular protection, assistance and cooperation throughout the migration cycle
- (15) Provide access to basic services for migrants
- (16) Empower migrants and societies to realize full inclusion and social cohesion
- (17) Eliminate all forms of discrimination and promote evidence-based public discourse to shape perceptions of migration
- (18) Invest in skills development and facilitate mutual recognition of skills, qualifications and competences

- (19) Create conditions for migrants and diasporas to fully contribute to sustainable development in all countries
- (20) Promote faster, safer and cheaper transfer of remittances and foster financial inclusion of migrants
- (21) Cooperate in facilitating safe and dignified return and readmission, as well as sustainable reintegration
- (22) Establish mechanisms for the portability of social security entitlements and earned benefits
- (23) Strengthen international cooperation and global partnerships for safe, orderly and regular migration

### On migration, BIC sees need for cooperation, focuses on root causes



<https://news.bahai.org/story/1301/>  
19 December 2018

United Nations Secretary-General António Guterres (center) speaks with Louise Arbour, Special Representative of the Secretary-General for International Migration, during the Intergovernmental Conference to Adopt the Global Compact for Safe, Orderly and Regular Migration. At left are Michelle Bachelet, United Nations High Commissioner for Human Rights, and María Fernanda Espinosa Garcés (second from left), President of the 73rd session of the General Assembly. (UN Photo/Sebastien Di Silvestro)

MARRAKECH, Morocco — More than a quarter billion people have left their home countries—many compelled by war, economic deprivation, or environmental degradation—in search of a better future elsewhere. To address this growing movement of populations, world leaders gathered last week at a historic conference where 164 nations adopted the first-ever United Nations global agreement on a common approach to international migration.

Called the Global Compact for Safe, Orderly and Regular Migration, the non-binding pact aims to foster a cooperative international approach to migration and reduce the risks and challenges for people on the move.

“Understanding the deeper causes of international migration is forcing us all to look at how the affairs of an increasingly global society are organized,” says Baha’i International Community (BIC) representative Simin Fahandej, who participated in the conference held on 10 and 11 December in Marrakech, Morocco. “This agreement has brought the countries of the world into a global conversation about an issue that has mostly been dealt with at the national or regional level.”

Over the past five years, the Baha’i community has been engaged in national and international forums focused on migration. It has been working with diverse social actors to better understand the deeper causes of forced migration, its impact on societies, and insights that can help humanity to move forward in addressing this issue through consultation and collaboration.

“It seems inevitable that movements resulting from inhumane and intolerable circumstances will continue to increase unless there is a broad and

concerted effort to address the underlying causes,” explains Ms. Fahandej. “The Global Compact for Migration highlights the willingness of many in the international community to look fundamentally at some of those causes and to begin to ask searching questions: What about current structures, systems, and attitudes is perpetuating the conditions causing millions of people to leave their homelands? How can we expect substantial change in the movement of populations if the structures that propel inequality and war do not change?”

The BIC representatives also noted the acknowledgment by leaders that, although global challenges must be addressed collectively, the precise nature of the questions facing the different regions of the world vary.

“This led to a discussion about the responsibilities of different regions,” adds Rachel Bayani, who attended the conference on behalf of the BIC Brussels Office. “Some would need to reflect on how their policies—for instance, on trade, on

investment, on the environment—inadvertently affect the socio-economic conditions in the countries of origin. Others would need to explore how they could address the conditions within their own countries that are forcing people to leave.”



On Migration, BIC sees need for cooperation, focuses on root causes. Louise Arbour, Special Representative of the Secretary-General for International Migration, speaks during the opening ceremony of the

recent UN migration conference. (UN Photo/Abdelouahed Tajani)

A BIC statement issued ahead of the conference reiterates the need for a global focus on migration and “a long-term approach” that “calls for a far-reaching, multi-dimensional, dispassionate and informed conversation around the issue of migration.”

“That conversation cannot fall short of examining social, political and economic structures, systems and attitudes that underpin and perpetuate the current order,” the statement asserts. “It needs to include a genuine reflection on how this order can be redesigned to ensure an adequate response to the needs of masses of the world’s population living in situations of war, poverty and oppression. Most importantly, it needs to be based on the understanding of the indisputable interconnectedness of our societies, and the reality that humanity’s collective life suffers when any one group thinks of its own well-being in isolation from that of its neighbours.”

The conference was conceived in September 2016 when the UN General Assembly unanimously

agreed to prepare a global migration agreement and to meet this month to adopt its text. The process has not been without challenges; nearly 30 UN member states have since backed out of the agreement.

The 34-page global compact is a non-binding declaration that aims to ensure a life of safety and dignity for migrants and to better manage the movement of populations. The agreement includes 23 objectives for “safe, orderly, and regular migration,” including: minimizing the adverse drivers and structural factors that compel people to leave their home country, managing international borders, eliminating all forms of discrimination and promoting evidence-based public discourse to shape perceptions of migration, and strengthening international cooperation.

Throughout the event, many government leaders noted the need for an international solution to the challenges placed on nations by migration. “We must equally address the drivers and outcomes of irregular migration,” explained Sierra Leone’s President Julius Maada Bio.

German Chancellor Angela Merkel praised the compact’s focus on “the foundations of international cooperation.” She added that “globalization, if we want to give it a human face, can only be shaped in such a humane way when all countries on this planet have fair and equal opportunities to develop.”

About 3,200 people attended the conference, including representatives of more than 150 countries.

Read more from the BIC about its statement at the UN conference.

(Editor’s note: On 19 December, to more accurately reflect the text of the Global Compact, the first paragraph of this story was modified and a second added.)

## Viewing the movement of populations in the larger context of humanity's collective life

Baha'i International Community Statement for the  
Intergovernmental Conference on the Global Compact for Migration  
Marrakech, Morocco, 10 December 2018

<https://www.bic.org/statements/viewing-movement-populations-larger-context-humanitys-collective-life>

The movement of populations has, over the centuries, allowed civilisations to come into contact with insights and advances made elsewhere, and enabled entire societies to emerge. Today, it is one of the means by which the bonds between peoples of diverse backgrounds are continuously strengthened and is a key catalyst in the emergence of a world community. In its current form, however, the movement of populations, often prompted solely by the desperate need of individuals to seek a viable future elsewhere, is shedding light on the urgent necessity to revisit the way in which humanity is organised.

The Global Compact for Safe, Orderly and Regular Migration dated 11 July 2018 highlights the need to “Minimize the adverse drivers and structural factors that compel people to leave their country of origin” (Objective 2). In this light, one cannot overemphasise the importance of viewing the movement of populations in the larger context of humanity’s collective life and as yet another symptom of much deeper and far-reaching concerns.

Unprecedented numbers of people around the world have been displaced from their homes, fleeing war, violence and persecution, and a growing number of migrants see themselves with no choice but to leave fragile states, economic deprivation and environmental degradation to search for better lives elsewhere. At the receiving end, these movements have put an enormous strain on some countries who, themselves fragile, are bearing, however ill equipped, the largest share of those displaced. Other countries have also been put under social and political stress, giving way to discourses of fear and prejudice. Governments, swept up in the immediacy of the challenges, feel forced to respond by adopting restrictive policies or by showing leadership through rapid and mostly short-lived responses.

What is becoming increasingly apparent is that those forms of mobility, which are caused by despair and the need to survive, cannot merely be the object of an expedient political or humanitarian solution, nor can they fundamentally be addressed by the adoption of one or the other form of migration policy. The need for a long-term approach, which addresses the underlying causes that give rise to and perpetuate movements, has never been more keenly felt.

Such a long-term approach calls for a far-reaching, multi-dimensional, dispassionate and informed conversation around the issue of migration. That conversation cannot fall short of examining social, political and economic structures, systems and attitudes that underpin and perpetuate the current order. It needs to include a genuine reflection on how this order can be redesigned to ensure an adequate response to the needs of masses of the world’s population living in situations of war, poverty and oppression. Most importantly, it needs to be based on the understanding of the indisputable interconnectedness of our societies, and the reality that humanity’s collective life suffers when any one group thinks of its own well-being in isolation from that of its neighbours.

The implications of the above are extensive and the reasons compelling millions of people to move are manifold and complex. Take poverty for example, just to name one of the drivers of displacement. Any framework claiming to address movements caused by the lack of hope in a viable future, cannot shy away from looking at the continuously widening economic disparity existing at the global scale, the generation, distribution and utilisation of wealth, the organisation of the world’s raw materials, or the coordination of markets. After all, it would not be reasonable to expect to minimise the drivers of migration while neglecting to reconsider economic processes that leave some countries with little chance to prosper.

The state of affairs described above is not just reinforcing global inequality, but also fueling many of the contemporary conflicts that result in millions of refugees and displaced people. One can only imagine the depth and intricacy required of any conversation that would attempt to disentangle the various contributors to war, terrorism, and violence perpetrated in the name of religion. However insuperable this may seem, no serious and responsible attempt to address the situation of refugees can be dissociated from the broader question of how to stem and overcome conflict.

Although these challenges must be addressed collectively by all, the precise nature of the questions facing the different regions of the world will naturally vary. Some must reflect on the inadvertent effect of their policies, whether foreign, trade, investment or environmental, on the socio-economic conditions in the countries of

origin. Others must explore how they can eradicate, within their own countries, those habits and patterns which feed conflict, deepen impoverishment, and leave their citizens deprived and prone to negative influences.

As insurmountable and unrealistic as the task of re-examining some of the foundations of our current order might appear to be, if not given due consideration, there is no reason to expect that the undesired aspects of the movement of populations will not take further impetus and become untenable for all regions in the world. The proposition that regions can in one way or another remain unaffected by the arrival of those from elsewhere is an illusion.

The global conversation to which the Global Compact has given rise, and the collective consciousness it is fostering, highlights the nascent ability of the international community to avoid succumbing to the uncritical assertion that the current order cannot be revisited. It provides a promising juncture to look at the movement of populations as intimately connected to the needs of an increasingly interwoven world, and to open the space for a broader consultation on the requirements of a humanity which is inevitably moving towards the next stage of its collective life.

### Since my retirement from school teaching...

Contributed by IEF member David Menham



Since my retirement from school teaching and the relaunching of my previous business I have stepped up, rather than slowed down, my everyday activities as regards Climate Change and Environmental Activism.

Last year I became a founding member of the Plastic Planet Verein a citizen's organisation here in Vienna which is determined to put an end to the over production of single use plastic here in Austria and throughout the EU.

The movement was inspired by the film 'Plastic Planet' produced a few years ago by Austrian film maker Werner Boote. Since its formation, our association has gained about 11,000 members on

Facebook and has a core of around 10 activists here in Vienna and Steiermark that are the main driving force behind the movement. (Facebook:Verein Plastic Planet Austria)

In addition, through my membership of SERVAS Austria <http://www.servas-austria.org/wp/> I was invited to attend the 70th Anniversary Celebration of the Universal Declaration of Human Rights organised by the NGO Committee CoNGO <https://www.ngocongo.org>. CoNGO's mission is to facilitate the participation of NGOs in the UN system. Working to ensure that NGOs have adequate access to UN meetings, conferences, special events, and documentation is a central CoNGO activity. The UN-NGO relationship has been evolving and changing since the signing of the UN Charter in 1945. The issue of NGO access to the UN has at times been under great scrutiny and debate, especially within the past several years. CoNGO's mission is to ensure the free exchange of ideas among all parties at the United Nations, by defending and upholding the rights of NGOs, based on the UN Charter, to voice their concerns.

### How can we keep global warming to 1.5°C?

Submitted by Arthur Dahl on 24. December 2018

In a recent special report in New Scientist, Graham Lawton has sketched out what we must do to limit global warming to 1.5°C, the agreed threshold for a chance of avoiding irreversible and dangerous climate change. Quoting a lead author of the latest IPCC report on 1.5°C: "We have to do everything, and we have to do it immediately." This is not impossible, since we have the necessary technologies, but it will require

unprecedented rates of transformation. The article lays out seven levels of increasing difficulty that must be pursued simultaneously.

First, some background. Setting aside agricultural carbon emissions, 48% of the remainder is to produce heat for buildings and industry, of which 27% is from renewable sources. The next 32% is for transport, with only 3% from renewables. The remaining 20% is for power generation, of which 25% is from renewable sources. Our fossil fuel emissions have already warmed the planet by 1°C, so we have to reduce net emissions to zero by mid-century. If everybody adopts a low-carbon lifestyle immediately, we can avoid overshooting the limit. Otherwise we shall need to use expensive carbon capture and storage (CCS) and unproven carbon dioxide removal (CDR) technologies to bring us back down to a safe level by 2100.

It is possible to calculate what our remaining carbon budget released to the atmosphere is to try to keep global warming to 1.5°C. Releasing 770 gigatonnes might give us a 50:50 chance of keeping to that target. If we want to raise the odds to two thirds, we should emit only 570 gigatonnes. With more pessimistic assumptions, the limit is considerably lower. Annual global carbon emissions are 40 gigatonnes. Half of that budget is already accounted for by existing and planned electricity generating plants unless we retire them early. To avoid continuing global warming, we must bring net emissions to zero. The following are all the things we must do together to succeed in that.

**Kill fossil fuels.** The move to renewable energy is accelerating, generating a quarter of our electricity in 2016, more than 10% of our total energy consumption, but we need almost complete decarbonization of electricity generation by 2050. Any continuing use of fossil fuels must be accompanied by carbon capture and storage (CCS).

**Travel light.** At present, more than 90% of our transport is powered by oil (petrol/gasoline, diesel and aviation fuel) and just 3% from renewables. A quarter of the energy-related CO<sub>2</sub> emissions come from transport, and this is growing at 2.5% per year. Even a 30% reduction by 2030 means switching to electric vehicles (powered by renewables), improving fuel efficiency, replacing oil by biofuels including for aviation, and making personal sacrifices like using buses and trains over cars and planes, and traveling less.

**Rebuild everything.** Our homes, shops, offices and buildings account for 23% of energy-related emissions, mostly electricity for lighting, heating, cooling, elevators, office equipment and appliances. But one third is fossil fuels (gas) used for heating and cooking. These emissions need to be reduced by 80-90% by 2050, requiring energy-efficient lighting, insulation and double-glazed windows, and non-fossil-fuel heating and cooking systems. We need to refurbish 5% of existing buildings every year, and make all new buildings zero carbon by 2020, moving away from carbon-intensive concrete and steel to carbon-neutral wood-based materials or changing construction methods entirely.

**A new industrial revolution.** Industry uses coal and other fossil fuels to produce heat and steam to produce metals, pulp and paper, chemicals, concrete and minerals, and this needs to be reduced by 80%. Phasing out coal, increasing energy efficiency and electrifying would only be a beginning. We need massive R&D to find new, carbon-free industrial process for cement, iron and steel, plus carbon capture and storage for uses we cannot replace in time. Some new technologies exist, but they must become more affordable and scaled up.

**Reap what we sow.** Land use produces one quarter of carbon emissions, raising issues of forests, farms and food. Growing food inevitably emits CO<sub>2</sub>, and pasture with cows on it is a gigantic source of CO<sub>2</sub> and methane. Land can be a carbon sink, and forests pull CO<sub>2</sub> out of the air. We need to intensify agriculture while consuming less of foods with high greenhouse gas emissions, especially from cattle, swapping pasture for forests and finding room to produce biofuels for aviation. We also have to reduce deforestation.

**Suck, not blow.** Reaching net emissions does not mean no emissions, since some cannot be eliminated, like nitrous oxide from agricultural fertilizers. Any remaining emissions need to be balanced by removing carbon dioxide already in the atmosphere. All pathways to 1.5C require carbon dioxide removal (CDR), for which we have no proven technologies. Planting forests is the simplest way. There are proposals for bioenergy with

carbon capture and storage (BECCS) where you grow biofuels, burn them, and sequester the CO<sub>2</sub>. This has not been done at scale and is a major risk in reaching the target.

**Change ourselves.** Addressing our demand for energy is the biggest challenge. When we use an electrical appliance, spend time inside a building, use hot water, travel anywhere in a vehicle, or buy or eat anything, we are contributing to the problem. We need to start today to make sacrifices: drive less, fly less, consume less meat, have fewer children. A plant-based diet reduces a food carbon footprint by 90%. Avoid beef with a carbon footprint three times pork and six times chicken. Tropical fruits imported by air, and cheese are other offenders. Reduce short car journeys; car-pool, bike or walk instead. But one vacation flight would wipe out the benefits of going vegetarian for a year or driving 2500 km less. In your home, replace appliances with energy-efficient models, lower the temperature of hot water, use a low-flow showerhead, do not leave appliances on standby, and dry washing outside. Smart thermostats can reduce household emissions by up to 26%. Moving to a smaller home can cut emissions by 27%. At the office, turning off lights and your workstation when leaving, and unplugging your phone charger, can cut emissions by up to 28%. Working from home in the US can mean driving 77% less.

Above all, there is a lack of political will for the biggest transformation ever. People have to demand these changes with mass movements. This may seem impossible, but we have to try. We need to convince everyone that green alternatives improve our quality of life as well as the environment.

Source: Summarized from Lawton, Graham. 2018. **Hitting 1.5°C**. Special Report. *New Scientist* Vol. 240, Issue 3207, pp. 31-37. 8 December 2018.

## Baha'is find spiritual rewards in minimalist living

<http://bahaius.wpengine.com/bahais-find-spiritual-rewards-in-minimalist-living/>  
December 13, 2018

*The Baha'i Faith teaches that we should enjoy the material things of life as long as we do not become too attached to them. The best use of our material wealth is in service to humanity. Here are two stories of Baha'is who find spiritual rewards in owning fewer possessions.*



Jeremy and Lucia Pane enjoy a guest-ready kitchen thanks to their decluttering efforts.

As a couple, the Panes, Lucia and her husband of six years, Jeremy, have pared down their possessions over the past several years and say they are living ever more intentionally as time goes on.

“Abdu'l-Baha teaches us that we need to have moderation in all things,” Jeremy says of a lifestyle that they feel aligns with their Baha'i Faith.

“I have kind of always been into minimalism,” Lucia says. “I've always been a very organized and tidy person, even growing up. I don't ever remember my parents asking me to clean my room. I *like* doing laundry and folding it and putting it away.”

According to Lucia, minimalism is “just having the things in your home or in your life that bring you joy or help you live your best life — and not holding on to all the extra.”

Lucia says that not having a lot of material possessions gives her more time to focus on other things and create a holistic Baha'i life.

“It means I can do my workouts in the morning and have more time for prayer or reading. It means not having to frantically clean or put things away when people come over for a devotional gathering and that we have time to pick out prayers or readings. It means that we're more relaxed when people come over.”

The Panes moved into a new condo in Skokie, Illinois, two years ago. “When we were looking for a new place to live,” Jeremy says, “we wanted to serve the community by providing space for Feasts [Baha'i community gatherings].”

“The Universal House of Justice [the international governing council of the Baha'i Faith] has been

requesting for years now that we have deep and meaningful conversations with our neighbors and friends and co-workers, and it was important to us to find a space that would make that easier.”

“Our home is not only for us but also for others,” Jeremy says, “It is to be shared.” The Panes share their home by inviting people for devotional gatherings, board game nights and by hosting overnight guests.

The Panes say moving from a one-bedroom apartment to a two bedroom condo was a catalyst for getting rid of a lot of their belongings because they didn’t want to move them. Although Lucia spearheaded the couple’s decluttering, she says Jeremy likes the principle of not holding onto things unnecessarily.

“We’ve worked on only keeping things that serve multiple functions,” he says. “I think the only thing that we have that only does one thing is a waffle iron.”

“Because you cannot make waffles without a waffle iron,” Lucia adds with a laugh. “And we like making waffles.”

“I’m not focused on getting the latest phone or a new this or that. I don’t even pay attention to that stuff anymore. I haven’t really bought new clothes in a couple of years,” Lucia says. “I have no clue what’s in season for clothing. What’s in season for me right now is warm clothes,” she quips. “Not focusing on all those material distractions gives me more time to focus on my spiritual life.”

Lucia grew up in Hawaii in a Baha’i family that fostered spare living.

“My parents lived in a geodesic dome house, which looks a little like half of a golf ball. It’s made of 96 triangles and there are no corners. No basement. No attic. No place to hide things.”

“My dad grew up in the ‘70s in the Czech Republic, a communist country where you held on to everything and you used everything because you just couldn’t get things. You were very creative with how you used and reused things.”

“One of the older Baha’is in my community growing up used to joke that you can’t take a U-Haul to heaven and that’s always stuck with me,” she

relates. “Don’t get attached to your material things because you can’t take them with you.”

Lucia attended college on the mainland in California and was conscious of paring down supplies she was bringing back and forth.

“If you load your trunk up and drive to college two hours away, it’s a different experience,” she says. “I started out with very little and just accumulated stuff while I was there.”

And although tidiness wasn’t on Lucia’s list of what she was looking for in a mate, she says it probably should have been. “We’ve definitely had some discussions about it — what my standard level of tidiness is and what his standard level of tidiness is — and they don’t always match.”

“You spend a lot of time learning about the person that you’re married to and the consultations we’ve had is really about the specifics, the nitty-gritty, of those core belief systems,” Jeremy says. “We’ve had some hard conversations about what the household could bear” in terms of convenience and caring for the environment. Owning a car is an example of a concession they’ve made.

“It would be much more environmentally conscious for us to give it up entirely,” Jeremy says. “We really have to do a very good job in scheduling to see who gets to use it.”

Lucia says having a decluttered home also helps her to control some of her feelings of anxiety. “Sometimes feeling closed in makes me feel anxious,” she says. “I was feeling like there was just too much *stuff* around. There was *stuff* on the table. There was *stuff* in the corner. There was *stuff* that we hadn’t unpacked after our move. And I finally just said, “Why are we keeping all this *stuff*?”

As an outgrowth of paring down their possessions, Lucia discovered the “zero waste” community online.

“Zero waste is about lessening your impact on the environment. It’s not about creating no waste at all, but minimizing your waste. Like minimizing your possessions, you minimize the amount of trash that you produce on a daily basis.”

“For me, plastic in the ocean is a huge issue,” Lucia says, “because I grew up on an island, taking care

of the ocean—and taking care of the Earth—has always been important to me.”

“We’ve had some very dire warnings from our scientific community about the effect that humanity is having on the planet,” Jeremy says.

“Jeremy and I have become more conscious about what we’re consuming. Who is making our clothing? How are they being treated? Are they being paid a living wage? And are they made from sustainable resources?

Because you do vote with your dollars,” Lucia says.

Jeremy paraphrases a quote from the Baha’i writings to explain how we might view the issue: “If the Earth is one country and mankind its citizens,

then we ought to treat all of humanity in a way that supports and sets up ways for people to make a livelihood.”

“If we’re all one human family,” Jeremy asks, “how is taking advantage of our brother, or how is taking advantage of our cousins helpful? It’s not.”

“A big thing rather than buying more is buying better,” Jeremy says. “That’s another thing that relates to minimalism. Instead of having more things, you just have better quality things.”

“And,” Lucia adds, “it’s feeling more connected to people around the world who make the products that we purchase.”

## World Science Day for Peace and Development celebrates right to science

Based on: <https://council.science/current/news/world-science-day-for-peace-and-development-celebrates-right-to-science>



The commemoration of World Science Day for Peace and Development at UNESCO headquarters in Paris on 10 November 2018 highlighted the importance of science in everyday life and the need to engage the wider public with contemporary issues related to science.

In celebration of the 70th anniversary of the Universal Declaration for Human Rights, the

theme for the 2018 international day was ‘Science, A Human Right’. At a time of enormous demands on science to produce actionable knowledge needed to achieve the Sustainable Development Goals, trust in science and scientific evidence has arguably been eroded by the spread of misinformation or ‘alternative facts’. The human right to access and participate in science and its benefits has never been more important.

Promoting equitable opportunities for access to scientific knowledge, data and expertise is at the heart of the International Science Council’s vision of science as a global public good, and informs all its activities. The World Science Day for Peace and Development provided an opportunity to reassert the human right to participate in and benefit from science in the context of today’s global challenges.

The event considered different aspects of the human right to science, including the right of all to access and participate in science, and the right of all to benefit from scientific advancements and their applications. This includes the availability, accessibility, quality and acceptability in society of science and its products, as well as the justiciability of the right to science. Future initiatives are needed to promote science as a human right, and to consider limits to the right to science, such as with regards to other human rights or important values.

Open science, including the development of scientific capacity globally, is all the more essential in the context of the digital revolution, which has profound implications for how scientific data is created, stored and accessed, and by whom.

## **Rise to Shine: The role of Indian Religious Institutions in Closing the Energy Access Gap**

Source: <http://www.bhumiproject.org/new-report-closing-indias-energy-access-gap/>

The Bhumi Project and GreenFaith have prepared a report looking at how religious institutions in India are implementing renewable energy solutions. Entitled Rise to Shine, the report shows that a growing number of religious and spiritual institutions, representing some of the India's largest and most influential, have been installing and utilising renewable energy for a number of years. Importantly, the report notes that these institutions offer untapped potential for accelerating efforts to end the energy poverty that afflicts more than 200 million people in India.

Indian religious and spiritual institutions command significant moral authority and have a large civil society presence. If engaged and equipped properly, they could play a transformative role in ending energy poverty in India. Their potential impact, however, has received very little sustained attention from regional and national governments, the renewable energy, energy access and social entrepreneur sectors, and funders.

Following a 2017 consultation in Mumbai between religious leaders and social entrepreneurs in the field of energy access, in 2018, the Bhumi Project and GreenFaith engaged EPG Consulting to conduct a modest, initial survey of the renewable energy efforts of Indian religious and spiritual institutions. The aim was to identify renewable energy efforts and trends in the Indian religious sector, to identify any involvement by Indian religious institutions in the area of energy access, and to determine further research and action steps in these areas.

Over a six month period they researched 30 Indian religious and spiritual institutions, distributed across the country, which had initiated some form of renewable energy and/or sustainability initiative. These institutions were from the Hindu, Islamic, Jain, Sikh and Christian communities, along with a number of non-denominational spiritual organisations. The stories showed how one of Indian society's most culturally influential sectors can make a far greater contribution to closing India's energy access gap.

The report suggests that collaboration with Indian social entrepreneurs in the field of energy access could enable religious and spiritual communities to dramatically accelerate the pace of distributed renewable energy development in rural areas of India which lack access to energy. This approach to localised clean energy development would also benefit from the social and economic capital that these spiritual communities have developed over decades of service in their communities.

By examining case studies from across India that represent all major religious traditions present in the subcontinent, the report shows that faith-based groups are using renewable energy to power their own facilities and social programs. While these actions align with these organisations' spiritual values, the report sheds new lights on the pragmatic elements of these energy decisions. Indian religious institutions have turned to on-site renewable energy solutions to reduce operating expenses and to provide back-up power during public power outages.

The findings indicate that India's large and diverse religious sector is at the early stages of adopting renewable energy, and at an even more preliminary stage of addressing energy access issues and advocating for ambitious responses to the climate and energy access crises. The size and influence of this sector means that it has the potential to make an important contribution on these issues in India.

Summary report: [http://www.bhumiproject.org/wp-content/uploads/2018/11/Rise\\_to\\_Shine.pdf](http://www.bhumiproject.org/wp-content/uploads/2018/11/Rise_to_Shine.pdf)

Download the full report: <http://www.bhumiproject.org/wp-content/uploads/2018/11/Rise-to-Shine-Full-Report.pdf>



<https://www.nature.org/en-us/what-we-do/our-insights/perspectives/10-groups-to-watch-in-2019/>

Let's be frank: 2018 was not exactly a banner year for the planet. Nearly every major environmental assessment presented grim results: crucial habitats like tropical forests continue to disappear; wildlife populations declined 60% over the last 40 years; and, perhaps most alarming, we're failing to make the progress we need to keep the climate within safe boundaries.

We still have a chance to turn things around, though. A major body of research led by The Nature Conservancy shows it is still possible to achieve a sustainable future for people and nature—if we take massive action in the next 10 years.

That means we need strong leadership, and not just from the usual suspects—saving the planet must be an all-hands-on-deck effort. So below, in no particular order, we present 10 groups to watch in 2019.

## 01 Teenagers

**THE REVOLUTION WILL BE SNAPCHATTED.** Forget your John-Hughes-movie stereotypes. Today's teens are civically active, globally minded—and they nearly unanimously agree that we need to do more to address climate change. A study of 31,000 youth from 186 countries found that climate change is their number one concern (surpassing terrorism, poverty and unemployment.) Over 90% agree that science has proven that humans are causing climate change, and nearly 60% plan to work in sustainability.

## 02 Weather Forecasters

**CLOUDY WITH A CHANCE OF CLIMATE CHANGE.** Watching the morning weather forecast over breakfast is daily ritual for many. So, it's not surprising that local TV meteorologists are one of the most accessible and trusted sources of scientific information. In 2012, only 55 weather reports in the U.S. mentioned climate change. Today, a network of more than 500 TV meteorologists are exploring the local impacts of climate change during their daily weather reports—resulting in a measurable increase in viewer understanding of climate science.

## 03 Mayors

**LOCAL LEADERS, GLOBAL GAINS.** From small towns to mega-cities, local elected officials are side-stepping national gridlock and committing to environmental action. The continued participation of the United States in the Paris Agreement may be uncertain, but a network of 405 mayors, representing more than 70 million Americans, have made it clear

that they will still act to address climate change. Globally, thousands of mayors have joined together to make similar commitments and city leaders from Shenzhen, China to Sao Paulo, Brazil are taking climate action to the local level through urban resilience and conservation.

## 04 Women

**WOMEN AT THE HELM.** At every level of leadership, from local communities to national government, conservation outcomes improve when women are involved. One global study found that women landownership directly correlates with better soil conservation, increased crop yields and decreased deforestation. In northern Australia, aboriginal women are increasingly joining the rangers program, helping conserve community land while also passing on traditional knowledge of bush plants and culture. The evidence is clear: environmental action is strengthened by gender equality.

## 05 Investors

**ALL INVESTING IS IMPACT INVESTING.** Market-rate returns or positive environmental impact? Both. That's what more than 70 percent of institutional investors want, according to a new survey – one more sign of impact investment going mainstream. Perhaps that's why investment giant BlackRock released tools allowing investors to track sustainability outcomes across *all* its products, not just designated impact funds. Since private investments are an order of magnitude larger than global philanthropic giving, this could be a game changer for funding environmental work.

## 06 Health Professionals

**JUST WHAT THE DOCTOR ORDERED.** Research shows there is an association between loss of trees and human mortality from cardiovascular and respiratory illnesses. In many urban areas, limited green space also negatively affects human mental wellbeing. Cardiology researchers at the University of Louisville School of Medicine are testing the effectiveness of urban tree planting as a method for improving public health. And it goes beyond trees—writing for *The Lancet* medical journal, 150 doctors warned that climate change “poses the biggest global health threat of the century.”

## 07 Indigenous Peoples

**THE EYES AND EARS OF THE LAND.** It’s a pattern we see repeated from Mongolia to Canada: indigenous peoples and local communities, with their deep knowledge of natural systems, are consistently the best stewards of landscapes and natural resources. Furthermore, indigenous lands hold much of the world’s remaining biodiversity—given the growing evidence for a direct correlation between loss of global biodiversity and a decrease in human health, and a recent report warning vertebrate populations are in severe decline, we won’t have a healthy future for people or nature without indigenous leadership.

## 08 Risk Managers

**RISKY BUSINESS?** Insurance and infrastructure—everyone needs them, no one’s excited about them. The opposite’s true of beaches and coral reefs – except that coral reefs *are* infrastructure, protecting 200 million people from storms and reduce expected storm damage by over \$4 billion annually. That’s why organizations like the International Red Cross are funding reef restoration in the Caribbean and hotel owners in Mexico are investing in regular maintenance of reefs and beaches

and setting up a reef insurance policy to protect their communities from storms.

## 09 Farmers & Fishers

**FARMERS, FISHERS, FEARLESS LEADERS.** Feeding the planet comes at a cost—food systems generate 29% of GHG emissions and are a major driver of biodiversity loss. But we may be turning a corner, as businesses and farmers explore practices that capitalize on soil’s massive carbon storage potential, even as they increase food production. And in the ocean, key market players like the Federated States of Micronesia are committing to 100% transparency in their tuna fisheries—meaning a healthier ocean, more resilient communities *and* greater catch yields over time.

## 10 Silicon Valley

**A MEETING OF MINDS, AND FLEECE VESTS.** OK, we know the world’s at a tipping point, and there’s little time to make big changes. That means conceiving and scaling new solutions on a short timeline—a startup specialty. Partnerships like the Techstars/TNC Sustainability Accelerator are nurturing companies that are developing technology to address challenges like water management and fisheries monitoring. As promising new technologies like AI and cloud computing come online, these partnerships will only become more important.

Some of these groups are making new contributions to environmental work. Others have made longstanding contributions that are just now being more fully recognized. Collectively, they are pushing us toward a healthier planet despite the odds. To learn more about how The Nature Conservancy is working with these and other groups, visit our Global Insights.

