Ten Reasons Why Climate Initiatives Should Not Include Large Hydropower Projects

A Civil Society Manifesto for the Support of Real Climate Solutions

Large hydropower projects are often propagated as a “clean and green” source of electricity by international financial institutions, national governments and other actors. They greatly benefit from instruments meant to address climate change, including carbon credits under the Clean Development Mechanism (CDM), credits from the World Bank’s Climate Investment Funds, and special financial terms from export credit agencies and green bonds. The dam industry advocates for large hydropower projects to be funded by the Green Climate Fund, and many governments boost them as a response to climate change through national initiatives. For example, at least twelve governments with major hydropower sectors have included an expansion of hydropower generation in their reports on Intended Nationally Determined Contributions (INDCs).

Support from climate initiatives is one of the reasons why more than 3,700 hydropower dams are currently under construction and in the pipeline. Yet large hydropower projects are a false solution to climate change. They should be kept out from national and international climate initiatives for the following reasons:

1. Particularly in tropical regions, hydropower reservoirs emit significant amounts of greenhouse gases. According to a peer-reviewed study, methane from reservoirs accounts for more than 4% of all human-caused climate change – comparable to the climate impact of the aviation sector. In some cases, hydropower projects are producing higher emissions than coal-fired power plants generating the same amount of electricity.

2. Rivers take about 200 million tons of carbon out of the atmosphere every year. In addition, the silt that rivers like the Amazon, Congo, Ganges and Mekong carry to the sea feeds plankton and absorbs large amounts of carbon. Hydropower projects and other dams disrupt the transport of silt and nutrients and impair the role of rivers to act as global carbon sinks.

3. Hydropower dams make water and energy systems more vulnerable to climate change. Unprecedented floods are threatening the safety of dams and alone in the US have caused more than 100 dams to fail since 2010. Dam building has exacerbated flood disasters in fragile mountain areas such as Uttarakhand/India. At the same time more extreme droughts increase the economic risks of hydropower, and have greatly affected countries from Africa to Brazil that depend on hydropower dams for most of their electricity.
4. In contrast to most wind, solar and micro-hydropower projects, dams **cause severe and often irreversible damage to critical ecosystems**. Due to dam building and other factors, freshwater ecosystems have on average lost **76% of their populations since 1970** – more than marine and land-based ecosystems. Building more dams to protect ecosystems from climate change means sacrificing the planet’s arteries to protect her lungs.

5. Large hydropower projects **have serious impacts on local communities and often violate the rights of indigenous peoples** to their lands, territories, resources, governance, cultural integrity and free, prior informed consent. Dams have **displaced at least 40-80 million people** and have negatively affected an estimated **472 million people living downstream**. The resistance of dam-affected communities has often been met with egregious human rights violations.

6. Large hydropower projects **are not always an effective tool to expand energy access for poor people**. In contrast to wind, solar and micro-hydropower, large hydropower dams depend on central electric grids, which are **not a cost-effective tool to reach rural populations** particularly in Sub-Saharan Africa and the Himalayas. Large hydropower projects are often built to meet the demands of mining and industrial projects even if they are justified by the needs of the poor.

7. Even if they were a good solution in other ways, large hydropower projects would be **a costly and time-consuming way to address the climate crisis**. On average large dams experience **cost overruns of 96% and time overruns of 44%**. In comparison, wind and solar projects can be built more quickly and experience **average cost overruns of less than 10%**.

8. Unlike wind and solar power, **hydropower is no longer an innovative technology**, and has not seen major technical breakthroughs in several decades. Unlike with solar power, climate funding for large hydropower projects will not bring about further economies of scale, and does not encourage a transfer of new technologies to Southern countries.

9. **Wind and solar power have become readily available and financially competitive**, and have overtaken large hydropower in the addition of new capacity. As grids become smarter and the cost of battery storage drops, new hydropower projects are no longer needed to balance intermittent sources of renewable energy.

10. Hydropower projects currently make up **26% of all projects registered with the CDM**, and absorb significant support from other climate initiatives. Climate finance for large hydropower projects **crowds out support for real solutions** such as wind, solar and micro hydropower, and creates the illusion of real climate action. Including large hydropower in climate initiatives falsely appears to obliterate the need for additional real climate solutions.

For these reasons, the undersigned organizations and individuals **call on governments, financiers and other institutions to keep large hydropower projects out of their initiatives to address climate change**. All climate and energy solutions need to respect the rights and livelihoods of local communities.

**CO-SIGNERS:**
Afghanistan
Youth for Change Afghanistan Organization (YCAO)

Argentina
Asociación Ambientalista MayuSumaj - Asociacion Amigos de los Parques Nacionales - La Asociación Amigos de los Parques Nacionales (AAPN)

Armenia
EcoClub "Tapan"

Australia
Aboriginal Rights Coalition

Bangladesh
Alliance for Cooperation and Legal Aid Bangladesh (ACLAB) - Awaj Foundation - Badhan Hijra Sangha (BHS) - Bangladesh Adivasi Forum (BAF) - Bangladesh Centre for Human Rights and Development (BCHR&D) - Center for Bangladesh Studies (CBS) - Chittagong Hill Tracts Citizens' Committee (CHTCC) - Chittagong Hill Tracts Indigenous Jumma Association - CLEAN (Coastal Livelihood and Environmental Action Network) - Dhaka Single Women Association (DSWA) - EquityBD - JAGO NARI - Kapaeeng Foundation (KF) - Light House - Participatory Research Action Network (PRAN) - Peoples Development Community (PDC) - UBINIG (Policy Research for Development Alternative) - Zabarang Kalyan Samity (ZKS)

Brazil
Burkina Faso
Centre de Documentation et de Recherche Economiques et Sociales (CEDRES)

Cambodia
Banteay Srei - Cambodia Indigenous Youth Association (CIYA) - Equitable Cambodia - Highlanders' Association (HA) - Positive Change for Cambodia (PCC)

Cameroon
Green Development Advocates

Canada
Atlantic Regional Solidarity Network

Chile
Agrupación Cultural Wekeche - Agrupación Ecológica Altué - Amigos del Río San Rodrigo - Chile Sustentable - COMISIÓN JUSTICIA Y PAZ - Comité Pro Defensa de la Fauna y Flora (CODEFF) - Consejo de Defensa de la Patagonia Chilena (CDP) - Corporación Chile Ambiente - Corporación Privada para el Desarrollo de Aysén - Ecosistemas - Etica en los Bosques - Fiscalía de Medio Ambiente (FIMA) - Fundacion Nahuelbuta - Fundación Terram - Futaleufú Riverkeeper - Geute Conservación Sur - Observatorio Ciudadano - ONG FIMA - Verdeseo - Agrupacion Aysen Reserva de Vida - Colalición Ciudadana Aysén Reserva de Vida - Coalición Ecuménica por el Cuidado de la Creación

China
Taiwan Association for Rights Advancement for Ping Pu Plains. Aborigine Peoples (TARA-Ping Pu)

Colombia
Asociación Ambiente y Sociedad - ASPROCIG - Censat Agua Viva - Instituto Latinoamericano para una Sociedad y un Derechos Alternativos (ILSA) - Movimiento Rios Vivos

Costa Rica
Asada Santa Cecila - COECOCEIBA - La Asociación Amigos de los Parques Nacionales (AAPN) - Fundación Neotrópica - Movimiento en defensa de los ríos de Dota - PROAL-JAKUII (Proyectos alternativos/Pacuare) - UCR
Democratic Republic of Congo
Actions pour les Droits, l'Environnement et la Vie (ADEV) - La Coalition Réforme et Action Publique (CORAP) - Le Conseil Regional des Organisations Non Gouvernementales de Developpement (CRONGD)

Denmark
International Work Group for Indigenous Affairs (IWGIA)

Dominican Republic
Brigada Cimarrona Sebastián Lemba

Ethiopia
Ethiopian Human Rights Council

France
Fondation Danielle Mitterrand-France Libertés - International Council for the Indigenous Peoples of CHT (ICIP-CHT)

Georgia
Center of Innovative Development of Enterprises, EaP National Platform WG - Green Alternative

Germany
Urgewald

Guatemala
Breaking the Silence Maritimes-Guatemala Solidarity Network - CERIxim, el Colectivo de Estudios Rurales Ixim - Colectivo MadreSelva

India
Adivasi Women's Network (AWN) - Association for Promotion Sustainable Development (APSD) - Bharat Jan Vigyan Jatha - Bible Hill Youth Club - Borok Peoples' Human Rights Organisation (BPHRO) - Center for Advancement of Public Understanding of Science & Technology (CAPUST) - Centre for Research and Advocacy, Manipur (CRAM) - Civil Society Women Organization (CSWO) - Clean Energy Access - Empower INDIA - Forum for Policy Dialogue on Water Conflicts in India - Society for Promoting Participative Ecosystem Management (SOPPECOM) - Gram Bharati Samiti (GBS) - Gramya Resource Centre for Women - India Climate Justice Platform - India Network on Ethics and Climate Change -
Indigenous Perspectives - INECC - Lok Shakti Abhiyan - Manthan Adhyayan Kendra - Mishing Bane Kebang - Naga Peoples Movement for Human Rights (NPMHR) - Paryavaran Suraksha Samiti - River Research Centre - Samajik Seva Sadan - Sikkim Bhutia Lepcha Apex Committee - Society for Promoting Participative Ecosystem Management (SOPPECOM) - South Asian Dialogues on Ecological Democracy - South Asia Network on Dams, Rivers & People - The Timbaktu Collective - The Vigyan Vijay Foundation, New Delhi - ToxicsWatch Alliance (TWA) - VIKALP - Zo Indigenous Forum (ZIF) - Zomi Human Rights Foundation (ZHRF)

**Indonesia**

Aliansi Masyarakat Adat Nusantara (AMAN) - Inspirator Muda Nusantara - Serikat Perempuan Indonesia (Indonesian Women Organization) (SERUNI) - WALHI Jawa Barat

**Italy**

SONIA for a Just New World (SONIA)

**Kazakhstan**

Feminist League - "Jabagly-Manas" Mountain Club Public Association

**Kenya**

Indigenous Information Network (IIN) - International Alliance of Indigenous and Tribal Peoples of the Tropical Forests (IAITPTF) - Jamaa Resource Initiatives - Sengwer Indigenous Peoples Programme

**Kyrgyzstan**

Central Asia Toxic Action Network

**Malaysia**

#PowerShiftMsia - Borneo Project - Borneo Resources Institute (BRIMAS) - Communities' Information and Communications Centre (CICOM) - Community-Led Environmental Awareness for our River (CLEAR) - Jaringan Orang Asal SeMalaysia (JOAS) - Partners of Community Organisations (PACOS Trust) - Persatuan Belia Perubahan Iklim - Sarawak Citizens Movement (GASAK) - Sarawak Natives Customary Land Rights Network - SAVE Rivers Network

**Mauritania**

ONG Mer Bleue
Mexico
Agencia Internacional de Prensa Indígena (AIPIN) - CeIBA AC - Centro de Análisis e Investigación - Congreso Nacional de Comunicación Indígena (CNCI) - FUNDAR - Otros Mundos AC - Prodefensa del Nazas, A.C. - Servicios para una Educación Alternativa

Moldova
Eco-TIRAS International Association of River Keepers

Mongolia
Centre for Human Rights and Development (CHR) - Gobi Soil - OT Watch - Rivers Without Boundaries International Coalition - Steps Without Borders

Myanmar
Chin Human Rights Organization (CHRO) - Justice and Peace Commission (JPC)/Catholic Bishops' Conference of Myanmar (CBCM) - Nationalities Youth Forum (NYF) - Promotion Of Indigenous and Nature Together (POINT)

Nepal
Active Society Nepal (ASN) - Ageing Nepal - Beyond Beijing Committee (BBC) - Beyond Beijing Committee (BBC) - Center for Indigenous Peoples' Research and Development (CIPRED) - Federation of Nepalese Indigenous Nationalities Journalists (FONIJ) - Indigenous Nationalities Women Youth Network (INWYN) - Kirat Chamling Association (KCA) - Kirat Chamling Language Culture Development Association (KCLCDA) - Kirat Chamling Youth Society (KCYS) - Kirat Welfare Society (KWS) - Kirat Youth Society (KYS) - Kulung Mimchha Guskham (KMG) - Lawyers' Association for Human Rights of Nepalese Indigenous Peoples (LAHURNIP) - National Forum for Advocacy, Nepal (NAFAN) - Nepal Federation of Indigenous Nationalities (NEFIN) - Nepal Kirat Kulung Bhasa Sankskriti Utthan Sangh (NKKBSUS) - Nepal Magar Association (NMA) - People Unity Youth Society (PUYS) - SunFarmer - United Coalition of Against All Discrimination, Nepal (UCAAD) - Unity Society - Youth Awareness Society Nepal (YASN) - Youth Federation of Indigenous Nationalities, Nepal (YFIN)

Netherlands
Both ENDS - Netherlands Centre for Indigenous Peoples (NCIV) - River Basin Friends (NE)

Nicaragua
Centro de los Derechos del Campesino (CEDECAM) - Centro para la Autonomía y Desarrollo de los Pueblos Indígenas (CADPI)
**Nigeria**
Labour, Health and Human Rights Development Centre

**Pakistan**
Advocacy, Research, Training and Services (ARTS) Foundation - DAMAAN Development Organization

**Panama**
Alianza para la Conservacion y el Desarrollo (ACD) - Centro de Incidencia Ambiental (CIAM)

**Peru**
Centro de Promocion Estudios de la Mujer - Instituto Jajachupan - Movimiento Ciudadano frente al Cambio Climático (MOCICC) - Paz y Esperanza

**Philippines**
Alyansa Tigil Mina (Alliance Against Mining) - Asia Indigenous Peoples Netowrk on Extractive Energy and Industries (AIPNEE) - Asia Pacific Indigenous Youth Network (APIYN) - Asia Pacific Research Network (APRN) - Asian Peoples' Movement on Debt and Development (APMDD) - BAI Indigenous Women's Network - Center for Women's Resources (CWR) - Cordillera Disaster Response & Development Services (CorDis RDS), Inc. - Cordillera Indigenous Peoples Legal Center (DINTEG) - Cordillera Peoples Alliance (CPA) - International Indigenous Peoples Movement for Self Determination and Liberation (IPMSDL) - KALIKASAN-People's Network for the Environment - Kalipunan ng Mga Katutubong Mamamayan ng Pilipinas (KATRIBU) - Migrante International - NGO Forum on ADB - Philippine Rural Reconstruction Movement (PRRM) - Philippine Task Force for Indigenous Peoples Rights (TFIP) - Tebtebba (Indigenous Peoples’ International Centre for Policy Research and Education) - Tribal Government of the Philippines

**Russia**
Altai Regional Public Fund for 21st Century Altai - Amur Ecological Club Ulukitkan - Arkhangelsk Regional Youth Ecological Public Organisation (Aetas) - Association of Environmental Journalists - Biodiversity Conservation Center - Bureau for Regional Outreach Campaigns (BROC) - Buryat Regional Association on Lake Baikal - Center for Support of Indigenous Peoples of the North (CSIPN) - Council of the All-Russian Public Organization "Socio-Ecological Union" (SEU) - ECA Green Movement - Ecological Center "Dront" - Environmental Watch on North Caucasus - Great Baikal Trail Association-Buryatia

**Senegal**

ARCADE - Lumièrè Synergie pour le Développement

**Sri Lanka**

Earth Environment Protect Organization (EEPO) - Sevalanka Foundation

**Switzerland**

Bruno Manser Fund

**Tajikistan**

Foundation to Support Civil Initiatives (FSCI)

**Tanzania**

Pastoralists Indigenous Non-Governmental Organization's Forum (PINGO's Forum)

**Thailand**

Asia Pacific Forum on Women, Law and Development (APWLD) - Community Resource Centre - Focus on the Global South Mangrove Action Project - Sustainable Development Foundation (SDF)

**Uganda**

National Association of Professional Environmentalists (NAPE) - Uganda Land Alliance (ULA)

**United Kingdom**

Bianca Jagger Human Rights Foundation - Forest Peoples Programme (FPP) - International Tibet Network
United States
Amazon Watch - Bank Information Center - Center for International Environmental Law (CIEL) - EarthRights International (ERI) - Friends of the Earth US - Gender Action - Inclusive Development International (IDI) - Institute for Policy Studies - International Accountability Project - Natural Resources Defense Council (NRDC) - Rainforest Action Network - St. George Island Institute

Uruguay
CEUTA

Uzbekistan
Public Association "EKOLANDSKAPE"

Vietnam
CCD - Centre for Sustainable Community Development (S-CODE) - Centre for Sustainable Development in Mountainous Areas (CSDM) - Centre of Research and Development in Upland Areas (CERDA) - Experimental School - FREC - Ho Chi Minh National Politic Academy - People and Nature Reconciliation - Vietnam Indigenous Knowledge Network (VTIK)

International
Asia Indigenous Peoples Pact (AIPP) - Asociación Interamericana para la Defensa del Ambiente (AIDA) - CEE Bankwatch Network - Carbon Market Watch - International Rivers - International Socio-Ecological Union - Jeunes Volontaires pour l'Environnement (JVE) - Oxfam - REDLAR