

About Vasudha Foundation

Vasudha Foundation was established in April 2010 with the objective of promoting environment-friendly, socially just, equitable and sustainable models of energy by focusing on renewable energy technologies and lifestyle solutions. We believe in the conservation of Vasudha, which in Sanskrit means the Earth, the giver of wealth and in the sustainable consumption of its bounties.

We believe in adopting green ways for a good earth.

Key Objectives

- Bring about a reduction in greenhouse gas emissions in the environment and ensure energy efficiency, energy security, energy independence, and sustainable development.
- Develop the demand for all modes of renewable energy (solar, wind, biomass power generation).
- Promote the concept of energy efficiency (energy efficient buildings and eco-friendly lifestyle products).
- Create awareness about the potential and benefits of alternative modes of energy generation by setting up show-case models.
- Promote the concept of 'Low Carbon Solutions' and 'Green Economies'.
- Promote environmentally sustainable products, processes, and concepts for individuals, institutions and organizations by interfacing with manufacturers, vendors and customers.
- Research, document, and prepare reports to build awareness on renewable energy issues.
- Innovate renewable energy and energy efficiency applications.
- Establish training programs and conduct capacity building activities.

Key Program Areas



Renewable Energy & Energy Policy

Vasudha Foundation endeavours to bring changes in the policy framework in order to promote environment-friendly energy models, and also to ensure a large-scale penetration of these models and systems in order to ensure energy access for all.

The organisation promotes greater energy access for rural communities and promotes the use of clean energy. In the past, Vasudha Foundation has worked towards promoting the use of decentralized renewable energy and analysed the economics of central grid connectivity versus decentralized renewable energy options.

Vasudha has constantly striven to up the advocacy for the promotion of shift in utilizing the renewable energy resources both at the level of policy and communities. In the past, the Oxfam supported the Bhutan project and the Sustainable Cities project supported by CDKN, demonstrate this diversity of Vasudha's approach. At present, the joint initiative by Vasudha Foundation and Pan African Climate Justice Alliance (PACJA) to bring together stakeholders from India and Africa to work towards scaling up of renewable energy, is a long-term commitment by the organisation to continue working in this sector.

Further, Vasudha Foundation has also embarked on a workstream which is the 'Energy Transition Initiative'. As part of this workstream, a number of research and advocacy projects are currently being implemented, which presents a business and economic case for India to transition from a fossil fuel-intensive electricity generation to a non-fossil fuel, renewable energy dominated electricity generation.

Vasudha Energy Mapping Initiative funded by Pool for International Energy and Growald Family fund is one of the flagship projects under the 'Energy Transition Initiative'. The objective of this research and advocacy project is to evaluate the economics of continued dependence on fossil fuel to meet India's electricity and energy needs, vis-à-vis, renewable energy up-scaling.

The second project under the ,'Energy Transition Initiative' is the research on 'Stranded Assets and Subsidies for Coal Power in India', which is a joint project of Vasudha Foundation, The Overseas Development Institute and the International Institute for Sustainable Development, and is supported by the Pool for International Energy and the Growald Family Fund.

The third project under the "Energy Transition Initiative" is the research and advocacy on 'The Business Case for Energy Transition for India' in its first phase it featured a study on the Water-Energy Nexus and the second phase focuses on Air Quality-Energy Nexus. This project is being supported by Heinrich Boll Foundation, India office.

Key Program Areas

Climate Change & Climate Negotiations



In the context of reducing global greenhouse gas emissions and promoting low carbon development, Vasudha Foundation has been actively engaged in carrying out research on climate policy in India. The Foundation is actively involved and engaged in the climate negotiations that take place under the aegis of the United Nations Framework Convention on Climate Change (UNFCCC).

Vasudha's work on the GHG emissions has been a constant engagement of the organisation across multi-sectors. **GHG Platform India** and the **GIZ project** are the ongoing work of the same.

Vasudha Foundation with support from Oak has also embarked on the creation of a **Pan-India Platform to Strengthen Actions on Climate, Environment, and Development**. This idea behind the platform is to connect the voices from the ground on the issue of climate, environment, and development, and with the intent of making India's development pathway a climate-resilient development pathway.



Engagement with International Financial Institutions

Vasudha Foundation has been engaging with Multilateral Development Banks (MDB), namely, the World Bank Group, African Development Bank (AfDB) and the New Development Bank (NDB) and the Asia Infrastructure Investment Bank (AIIB) on prioritising funding for sustainable infrastructure and increasing the share of renewable energy in the MDB's energy portfolio of project funding and support. Furthermore, the organisation is also engaged with the MDBs to fund projects that can help countries to meet with the Paris Agreement Goals of Climate Change.

Collaborations

Multi-Stakeholder Engagement



Vasudha Foundation networks with the government ministries/departments, international organisations, public and private sector organisations, civil society, and academic experts to work on projects awarded to them.

The Foundation has been actively involved with international organisations such as Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), DFID-UK, Shakti Sustainable Energy Foundation, ClimateWorks Foundation, Heinrich Böll Stiftung Foundation (HBF), Climate and Development Knowledge Network (CDKN), WWF-India and Christian Aid. Vasudha and PACJA with support from the Mott Foundation have initiated a long-term coalition between various stakeholders from India & Africa working in the renewable energy sector.

Our activities in the above areas have cross-cutting themes such as technology assessment and policy reforms.

Some of the key activities are:



Projects and Activities

Climate Change & Energy Transition Initiatives



GHG Platform India - An Indian Civil Society Initiative to Understand India's GHG Emission Estimates

GHG Platform India is a collective civil society initiative providing an independent estimation and analysis of India's Greenhouse Gas (GHG) emissions across key sectors, namely - Energy, Industrial Processes and Product Use (IPPU), Agriculture, Forestry & Other Land Use (AFOLU) and Waste. The platform comprises notable civil society groups in the climate and energy space in India- Council on Energy, Environment and Water (CEEW), Center for Study of Science, Technology and Policy (CSTEP), ICLEI Local Governments for Sustainability-South Asia, Shakti Sustainable Energy Foundation, Vasudha Foundation and World Resources Institute-India. The platform seeks to add value to the various ongoing GHG estimation efforts by helping address existing data gaps and data accessibility issues, extending beyond the scope of national inventories, and by increasing the volume of analytics and policy dialogue on India's Greenhouse Gas emissions sources, profile, and related policies.

Phase III is in progress for the platform. During Phase I of the project, the platform prepared national level emission estimation from 2007 to 2012. During Phase II the time series was extended from 2005 to 2013, disaggregated by each sector and subsector.



In Phase III of the platform, the time series is further extended to 2015. Emissions have been estimated from 2005 to 2015 at the national and state level. The platform also hosts national and state-level trends with the focus of emission mitigation along with stand-alone publications related to sector-specific analysis on GHG emissions in India. Additionally, the platform has assessed the impacts of existing and proposed policies in Gujarat in respect to all the sectors. As part of the platform, Vasudha has taken up the AFOLU sector lead. In an engagement with the Madhya Pradesh government, we are also involved in updating the first version of the State Action Plan on Climate Change for MP from a mitigation perspective. We have also come out with a policy brief that recommends the government in covering the gaps of inventorization process. The efforts of the Platform have been recognised in the Second Biennial Update Report (BUR II) submitted to the United Nations Framework Convention on Climate Change (UNFCCC).

Going forward in the fourth phase of this platform, it is intended to extend the time series of annual national GHG emissions estimates for years 2014 and 2015. Further, the platform will also engage with the central and state governments to undertake QA/QC inventory process.

The database produced and maintained by the platform is available in the public domain and can be accessed on www.ghgplatform-india.org

Vasudha Energy Mapping Initiative

Vasudha's Energy Mapping initiative (www.vasudha-emi.in) is a web-based reservoir of analytics, data and interactive information on Power generation in India. The project in its initial stage offered information on coal-based thermal power plants. In its next phase, there have been additions to the existing parameters on the coal-based thermal power plants. And have begun compiling information and building the database which will be the premise for the energy mapping of other energy sources, such as solar, wind, hydro, gas and oil, similar to the parameters for the coal-based database.

This project is supported by the Pool Fund on International Energy (PIE), hosted by the European Climate Foundation (ECF). The objective is to revisit the widely held assumptions causing the pursuance and reliance on conventional energy pathways in India. And to look into the challenges and barriers of the same in order to explore alternatives to existing energy paradigms.

At present, the energy mapping platform offers information on operational and proposed thermal power plants (TPPs) in India which is based on an extensive database put together by the Vasudha Foundation team. The database has been built to comprise information on the following six parameters:

- Geographic parameters cover information on the proximity to Eco-sensitive zones, zoning power plants based on its vulnerability to natural disasters.
- Performance parameters comprise of the performance levels of Thermal Power Plants measured by Annual Energy Generation, Plant Load Factor, and Auxiliary Energy Consumption.
- Economic parameters capture the linkage to HDI levels and Energy Access in the region.
- Water parameters give information on water consumption levels and water linkages, including, assessment of the current water levels in the region.
- Alternate Energy pathway covers the parameters which capture the potential for renewable energy alternates in the region.
- Air Quality parameters include information on Air Pollution, Carbon Emissions etc.

The platform gives the user an overview of the TPPs with interactive maps. And the Analytics page offers comparative analysis through graphical representation and GIS (Geographic Information System) Maps. The information compiled apart from the existing six parameters include the forced outages for the power plants, the daily and monthly generation for the past four years and power purchase cost among others. The newly compiled information will be added to the platform.

Vasudha Energy Mapping Initiative can be accessed on www.vasudha-emi.in



Integrating Climate Change and Environment into Development - Bringing together common voices in India | OAK Foundation

As a part of the ongoing processes unveiled under this project, we have been able to setup a platform as was envisaged in the original concept. Thus, the Climate, Environment, Development Platform – India (CEDPI), which is a Pan-India platform of organisations that have come together to explore options and pathways for greater sustainability of India's development programmes and processes in the climate and environment space has been established. Vasudha Foundation as the secretariat of this platform. The platform currently has around 20 organisations in its fold, some of which work at a Pan-India level, while many of them work in focused states such as Uttar Pradesh, Bihar, Tamil Nadu, Kerala, Andhra Pradesh, Telangana, Karnataka etc.

The platform has been established to create a network of civil society groups and actors around climate change and environmental issues that can move forward the pro-poor sustainable developmental agenda. The ultimate objective of such a platform would be to engage with select State Governments and the Union Government departments to proactively address issues of natural resources management, clean energy, climate change, sustainable use and conservation where needed, in order to achieve an equitable, sustainable and low carbon development trajectory.

Overarching GOALS of the platform

- Exploring the linkages between sub-national actions and their synergies in the achievement and/or enhancement of India's NDC targets
- Integrating mitigation and adaptation concerns at the subnational level for climate-resilient development
- Explore the interface between NDCs and SDGs and facilitate their convergence
- Bring together disparate voices on climate, environment and development to amplify the need for integrated actions



India's stranded assets: how government interventions are propping up coal power

Under the United Nations Framework Convention on Climate Change's Paris Agreement in 2015, governments committed to keeping the global temperature increases to 2 degree Celsius and pursue efforts towards a more ambitious 1.5degree Celsius target. Global decarbonization efforts will increase the risk of stranding assets, which implies loss of value, revenue or return on investment, in fossil fuel production assets. This is relevant to phasing out of inefficient coal-fired power plants, which could contribute to reducing the World's power sector emission by half.

India's key policy objective is to improve access to energy, a justification to enhance coal production. This, however, poses a challenge under the Paris Agreement. The objective of this project was to increase the understanding and build awareness of the role of fossil fuel subsidies in shaping stranded asset risk for both governments and the private sector (a case study of coal-fired power in India).

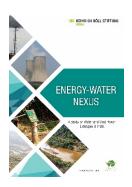
The report can be accessed here - http://www.vasudha-foundation.org/wp-content/uploads/India%E2%80%99s-stranded-assets September-2018.pdf



The Business Case for Energy Transition for India

Phase I: Water-Energy Nexus: The Business Case for Energy Transition for India

The Project funded by HBF aims to burst the myth that coal-fired power plants are sustainable, economical and best solutions to meet India's electricity requirements, by analysing the performance of existing coal-fired power plants and linking performance levels to various drivers. The first phase of the project particularly looked at the water and coal linkages. The hypothesis in the first phase of the project was that performance levels of coal-fired power plants, measured both in terms of annual generation as well as daily and monthly generation is being affected due to acute water shortages. Further, new coal-fired power plants being built rampantly on various river basins, that are under threat, could affect not only their performance but also the generation costs.



In the first phase, the Vasudha team used hard data and information from Government of India sources, and aimed at creating a knowledge base for energy sector investors and bankers, power producers, energy and water policymakers, that continued dependence on coal-fired power plants to meet India's electricity requirement could no longer be sustainable, due to strong coal-water linkages and increasingly scarce water situation in India.

The findings of the project took shape of infographics and a report which was released on November 29, 2018 and can be accessed at http://www.vasudha-foundation.org/energy-water-nexus-a-study-on-water-and-coal-power-linkages-in-india/



Phase II: Air Quality-Energy Nexus: The Business Case for Energy Transition for India

The Project funded by HBF for the second phase continues with the aim to burst the myth that coal-fired power plants are sustainable, economical and best solutions to meet India's electricity requirements, by analysing the performance of existing coal-fired power plants and linking performance levels to various drivers. The second phase looks at the air quality and coal linkage, in the light of the poor air quality index in India, a matter of much discussion.

A recent report released by the World Health Organization (WHO) in May 2018, indicated that 14 out of 15 most polluted cities in terms of 2.5 Particulate Matter Emissions are in India. It is important to note that one of the major contributors of 2.5 Particulate Matter Emissions are from coal-fired power plants and industrial emissions. The project aims to draw a comparison of air quality in the locations where power plants are located with areas where there are no power plants located, therefore, drawing an air quality and coal linkage. The project also draws a correlation to poor health condition due to rising pollution.

Using hard data and information from Government of India sources, the project aims at creating a knowledge base for energy sector investors and bankers, power producers, energy and clean air policymakers, introducing the health aspect wherein, continued dependence on coal-fired power plants to meet India's electricity requirement could no longer be sustainable, due to strong coal- air quality linkages, which would further aggravate the worsening health conditions due to rising pollution in India.

Development and Implementation of Climate Change Adaptation Demonstration Projects in Punjab (CCA RAI-II)

Vasudha Foundation has completed a project supported by Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ), for the state of Punjab. This was a part of a bigger project being implemented by GIZ under the bilateral cooperation of Ministry of Environment, Forest and Climate Change (MoEFCC), India titled 'Climate Change and Adaptation in Rural Areas of India Phase – II (CCA RAI-II)'. Vasudha Foundation has been the part of the second phase of the project undertaking the required assessment for the state of Punjab. The scope of the project involved identifying the



convergence of district-level plan with its integration to Climate Vulnerability and Climate Change Adaptation (with focus on water and agriculture sector). Vasudha has prepared a report of the aforementioned assessment based on secondary research, primary interactions in the state of Punjab and sample studies.

The sample studies were conducted to measure the difference in electricity consumption between the method of Conventional Transplanted Rice and Direct seeded rice, by installing electricity meters in the respective fields. Also, farmers from various villages were surveyed to understand the cost implications in both of the above-stated methods. Activities were also undertaken to ensure that the rice straw is not burnt, rather dealt using sustainable practices.

Vasudha Foundation also built a farmer network in the villages of Punjab and as a result, many farmers volunteered to cultivate rice using the technique of Direct Seeding for the first time this season.

Vasudha is also tasked to create an action plan on prioritised adaptation measures under selected schemes and/or programmes for implementation including possible convergence and potential adaptation benefits.

India-Africa Energy Access Partnership

This project is implemented in partnership with Vasudha Foundation, USA. The project involves creating sustainable and scale-up models of energy access solutions across African countries, by forging partnerships with successful social entrepreneurs in India and also by sharing of best practices and successful models of energy access programmes in India with African Civil Society group. The project also endeavours to work with multi-lateral Development Banks that have a presence in Africa, namely the World Bank Group and the African Development Bank on scaling up renewable energy. As part of the project, a team from Vasudha Foundation in partnership with the Pan African Climate Justice Alliance did a detailed mapping of the power sector in Zambia, with a focus on Energy Access and came up with a bouquet of solutions to address the issue of scaling up energy access and productive use of energy.







Policy Level Interventions and Engagement

Engagement with Multi-lateral Institutions:

The following is a brief overview of some of the interventions and engagement of the organisation with specific MDBs.

a) World Bank:

Vasudha Foundation has been actively involved in the Civil Society Policy Forum of the World Bank's Spring and Annual meetings, usually held in April and October each year. In April 2018, and October 2018 too, Vasudha Foundation was represented by Srinivas Krishnaswamy at the Civil Society Policy Forum. In April 2018, Vasudha Foundation organised a Panel Discussion on "Addressing Barriers to Scaling up Renewable Energy and Energy Access in Development Economies". The panel discussion had key representatives from the "Energy Extractives Division of the World Bank along with representatives from Energy Sector Management Assistance Programme (ESMAP), Bloomberg New Energy Finance, and from Civil Society groups.

b) AfDB:

Vasudha Foundation was one of the groups involved in getting the African Development Bank to organise its first Civil Society Policy Forum in Abidjan, on the 8th and 9th May 2018. Vasudha Foundation was also one of the co-organisers of a Panel Discussion along with the Pan- African Climate Justice Alliance, Oxfam International, Christian Aid and Mott Foundation on "Solutions for Scaling up Energy Access and Productive Use of Energy" across Africa. Srinivas from Vasudha Foundation made a presentation on "Learning from India on Scaling up Energy Access".

Vasudha Foundation was also an active participant, as a Civil Society Observer Organisation at the Annual Meeting of the AfDB held in Busan, South Korea, from the 21st to 25th May 2018.

c) NDB:

In yet another first, Vasudha Foundation along with Oxfam India engaged successfully with New Development Bank in creating a space for Civil Society Groups from BRICS Countries to engage with the Bank. A meeting of senior bank staff of the NDB with a few select civil society groups from the BRICS countries was organised in Shanghai on the 21st and 22nd November 2018, which resulted in a fruitful exchange of ideas for enhancing civil society engagement with the Bank.

Subsequently, Vasudha Foundation is also engaged with the bank on development indicators for sustainable infrastructure financing. This work is likely to be developed in the 2019-2020 financial year.

d) AIIB:

Vasudha Foundation was also represented as a Civil Society observer at the Annual Meeting of the Asia Infrastructure Investment Bank (AIIB), held in Mumbai on the 25th and 26th June 2018.

Other International Engagements:

Vasudha At COP 24, Katowice, 2nd to 15th December 2018

Vasudha Foundation is an accredited organisation to the United Nations Framework Convention on Climate Change (UNFCCC) and has been represented at the various Conference of Parties (COP) to the UNFCCC since its inception.

At the COP 24 too, Vasudha Foundation was present and actively engaged with country delegations on the Paris Rule Book finalisation.

Webinars

Vasudha Foundation as a partner and secretariat of the GHG Platform India helped facilitate a series of webinars under the Phase III activities of the platform.

India's GHG Emissions: Trends & Indicators May 10, 2019

CSTEP hosted a webinar, on behalf of GHG Platform India, a collective civil-society initiative providing independent estimation and analyses of India's greenhouse gas (GHG) emissions. The webinar covered trends in GHG emissions from key economic sectors (Agriculture, Forestry & Other Land Use (AFOLU), energy, industry, and waste). The also highlighted how these trends relate to India's climate policy and targets with reference to indicators like emissions intensity of GDP and emissions per capita at the national level.

CEEW WALINDIA

CEEW WALINDIA

SEATTH

YouTube Link: https://youtu.be/MSl6zJmPhSE

Sub-national Greenhouse Gas (GHG) Emission Trends in India and Policy Implications February 22, 2019

GHG Platform India held an engaging webinar hosted by ICLEI. This webinar featured the trends of state-level GHG emissions from key economic sectors of Agriculture, Forestry & Other Land Use (AFOLU), energy, industry, and waste in India. Insights and opportunities emerging from the analysis of emissions across Indian states along with policy implications and gaps for the sectors were also be shared.

YouTube Link: https://youtu.be/l7HejQMvQr4



Overview of Greenhouse Gas (GHG) Estimates For India November 16, 2018

GHG Platform India held an engaging webinar hosted by WRI India on the overall trend of GHG emissions from key economic sectors like Agriculture, Forestry & Other Land Use (AFOLU), industry, and waste in India. This webinar also featured the methodology and approach adopted for determining GHG estimates and the challenges faced during the analysis.

YouTube Link: https://youtu.be/yz rQ0KwJwk



Events/Seminars/Workshops

Towards A PanIndia Platform
for
Strengthening
Action on
Climate,
Environment,
And
Development

July 26, 2018 New Delhi Vasudha Foundation organized a two-day workshop on 26th and 27th July 2018 in Delhi, 'Towards A PAN India Platform for Strengthening Action on Climate, Environment and Development', supported by OAK Foundation. The workshop was conducted with the objective to integrate Climate Change and Environment into Development – Bringing together common voices in India.







Energy-Water Nexus Workshop and Report Release

November 30, 2018 New Delhi Vasudha Foundation in partnership with Heinrich Boll Stiftung conducted a workshop on the Energy-Water Nexus on Friday, 30th November 2018. Vasudha Foundation presented findings on the water and coal power linkages of India and unveiled its new report, titled "Energy-Water Nexus: A study on Water and Coal Power Linkages in India". This was followed by presentations on communities' perspective from Chandrapur on the competing demand for water for domestic and agricultural consumption versus others. The workshop also had perspectives on Mahanadi river basin and power plant linkages, followed by work case studies and discussions from Manthan Adhyayan Kendra and World Resources Institute. The workshop closed with a much-informed discussion on highlighting the various issues and recommendation on the energy-water nexus







Inception
Workshop –
Revision on State
Action Plan on
Climate Change

February 5-6, 2019 Bhopal An inception workshop for revising the Madhya Pradesh State Action Plan on Climate Change was held on 5th and 6th February 2019 in Bhopal. The workshop was attended by more than 50 individuals comprising of state officials and researchers of relevant departments in Madhya Pradesh. The interactive sessions during this two-day workshop involved rigorous brainstorming for preparing a roadmap to revise the MP SAPCC in order to align it with India's nationally determined contributions. It opened doors for GHG Platform India to have one on one discussions with the relevant departments which were imperative to figure out the strengths and weaknesses of every sector in terms of data availability and the



Financial Report

VASUDHA FOUNDATION

(registered under Indian Trusts Act, 1882)

12, 9th Main Banashankari 2nd Stage Bangalore Karnataka-560070

Receipts & Payments Account for the year ended 31st March 2019

As at March 31, 2019
13,842.50
3,159,423.85
24,530,167.00
17,000.00
2,932.00
246,955.00
27,970,320.35
510.150.0
518,152.34
2,634,890.70
8,405,703.00
20,000.00
107,438.00
213,945.65
88,560.00
364,712.00
116,350.00
270,000.00
18,999.0
1,498,217.0
14,256,967.69
3,077,059.0
20,597.0
2,219.0
95,892.2
369.5
25,000.0
1,138,725.0
179,108.0
53,304.0
7,500.0
4,130.0
6,372.0
199,861.0
612,818.5
19,679,923.0

As per our report attached

For Tinu Sood And Company & Con Chartered Accountants

FRN: 022090N NEW DELHI

Tinu Sood Partner

M.No: 511444, FRN: 022090N

Date: 30th August 2019 Place: New Delhi

Trustee



Vasudha Foundation

CISRS House, 14 Jangpura B, Mathura Road New Delhi – 110 014, India Tel/fax: + 91-11-2437-3680 info@vasudhaindia.org

www.vasudha-foundation.org