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DOI: <https://doi.org/10.56384/jes.v42i1.426>

An Analysis of EU-Pakistan Cooperation on Environmental Protection

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Abstract

This article examines the beginning and the impact of the environmental cooperation between Pakistan and the European Union (EU) from 1993 to 2023. The EU's environmental policies have formed the foundation on which they have helped Pakistan through its technical and financial activities since Pakistan is a state that is extremely vulnerable to climate change events and lack the resources to tackle these issues. The official documents, programs, and agreements have been analyzed to provide a chronological history of this cooperation between both entities and highlight the depth of the EU funded initiatives such as the Baluchistan Rural Development and Community Empowerment Program, the Revival of Baluchistan Water Resources Program, and the Energy Plus Programme with the Aga Khan Foundation in Pakistan along with their financial aid such as €886 million pledged in 2009 and €123 million in 2022 to make Pakistan a climate resilient state, which reflects their shared commitments towards sustainable development goals (SDGs) and Paris Agreement. As we move on further, this research has also identified key areas of improvements for both Pakistan and other developing countries in the Global South.

Keywords: EU-Pakistan cooperation, Sustainable development, Renewable energy, Climate change, Environmental policies.

Introduction

Over the last thirty years, climate change has surfaced as a serious and non-conventional security threat especially to developing states like Pakistan. Environmental degradation as a result of climate change has become a direct threat to stability and human life. Pakistan is a prime

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example of this vulnerability due to multiple natural hazards, most recently, the earthquake in 2005 and the floods in 2010 and 2022, which have exposed institutional and infrastructural weaknesses within the country. Despite being a minimal contributor to global emissions, Pakistan is one of the most adversely affected countries by climate change. The Germanwatch Climate Risk Index 2025 placed Pakistan as the most affected country for 2022.¹ In addition, the INFORM Severity Index identifies Pakistan as at high risk with low adaptive capacity.² Additionally, in terms of broader partners, the European Union has been a long-term supporter to Pakistan's resilience by grants; relief assistance and technical assistance in a variety of projects. The approved projects of Growth for Rural Advancement and Sustainable Progress (GRASP), Development through Enhanced Education Programme (DEEP), and Energy Plus with the Agha Khan Foundation demonstrates the EU's priorities towards renewable energies, water management, and rural development.

Despite this lengthy engagement, no systematic examination has been conducted on the EU–Pakistan environmental relationship over time. This study sought to address that gap by tracing cooperation over time and assessing the policies, agreements, and programs that impacted the socio-environmental landscape in Pakistan. This study also placed this cooperation in a global context such as the Paris Agreement, European Green Deal, and the UN Sustainable Development Goals, while also assessing agreements such as the Commercial Cooperation Agreements (CCAs), Strategic Engagement Plan (2019), and the Multi-Annual Indicative Programmes (2014, 2021). This research is focused on the following research questions to give an overall structure to this paper;

- How did EU – Pakistan environmental cooperation evolve from 1993 till 2023?
- What are the key achievements and challenges?
- What EU programs supported sustainability in Pakistan?
- What are some lessons to be shared with developing countries?

¹ Lina Adil, David Eckstein, Vera Künzel, and Laura Schäfer. "Climate Risk Index 2025," *Germanwatch*, 12 February 2025. <https://www.germanwatch.org/sites/default/files/2025-02/Climate%20Risk%20Index%202025.pdf>.

² Inter-Agency Standing Committee and the European Commission, "INFORM Report 2023; Shared evidence for managing crises and disasters," Publications Office of the European Union (Luxembourg, May 2023). <https://data.europa.eu/doi/10.2760/073809>.

This study used a qualitative, literature-based approach, evaluating primary (EU–Pakistan agreements, policy papers, institutional reports) and secondary documents (academic publications, sustainability indices and think-tank reports) from 1993 till 2025. The analysis is chronological, seeking to identify how the diplomatic, economic, and technical collaboration between the EU and Pakistan shaped Pakistan's environmental policies, while also highlighting strategies for future research and policy practices.

Environmental Action Policies of European Union

Climate Change is a fundamental challenge in the contemporary era; it is affecting all but especially the states in the global south. The burning of fossil fuels, including the burning of coal, gas and oil, agricultural activities on a large scale, industrial production, deforestation, and other human activities have led to emissions of greenhouse gases, which has rapidly altered the climate of the planet.³ The fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) established that the threat of climate change has transnational properties. It highlighted that collective multilateral efforts were needed to negotiate or create solutions to combat climate change. Moreover, it argued that the developing states need technical assistance and financial resources from developed states to control climate change. In addition, the report discussed some examples of the activities of non-governmental organizations and multinational corporations, including Microsoft's pledge to be carbon negative by 2030 or The Nature Conservancy's programs that defended wetlands, forests and oceans which are the three ecosystems that absorb and store most of the atmospheric carbon.⁴

The European Economic Community, the predecessor to the EU, began to connect the environment and economic security in the 1970s. The Maastricht Treaty of 1993 formalized this connection, and the European Union and its institutions have been guided by this connection through

³ "Causes and Effects of Climate Change," United Nations, 1 March 2022. <https://www.un.org/en/climatechange/causes-and-effects-climate-change>.

⁴ Intergovernmental Panel on Climate Change (IPCC), "Climate Change 2014: Synthesis Report." Contribution of Working Groups I, II, and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. Edited by R. K. Pachauri and L. A. Meyer (Geneva: IPCC, 2014). https://www.ipcc.ch/site/assets/uploads/2018/02/SYR_AR5_FINAL_full.pdf.

eight consecutive Environment Action Programmes, each lasting three to five years addressing issues ranging from pollution management to sustainability.⁵

The EU's Environmental Action Programmes (1970s–2030)

Ever since the 1970s, the European Union has implemented environmental action programmes (EAPs) that have informed its approaches and policies on climate and sustainability. The First EAP (1973) sought to balance economic growth with environmental protection, with an initial focus on pollution, waste, water, and air, but limited progress was made during economic downturns. The Second EAP extended similar aims with a greater emphasis on nature conservation and more stringent standards for water quality, but again apparent action could only be undertaken during better economic times.⁶

The Third EAP increased the importance of environmental standards in relation to the internal market, establishing a level playing field for industry while at the same time achieving pollution prevention at source and enhancing sustainable development.⁷ The Fourth EAP supported the development of sustainable business models consistent with the Single Market by enhancing awareness, guiding environmental assessments on impact and promoting green financial mechanisms.⁸

The Fifth EAP (1993), "Towards Sustainability", set out a stronger perspective for integrating the environment with economic policy to address continuing concerns about biodiversity loss, waste, and emissions, identifying key economic sectors while enhancing cooperation at a global level through the United Nations Environment Programme (UNEP), the Organisation for Economic Cooperation and Development (OECD), and

⁵ Didier Bourguignon. "Environment Action Programme Living Well, within the Limits of Our Planet," European Parliamentary Research Service, December 2018. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/630336/EPRS_BRI\(2018\)630336_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2018/630336/EPRS_BRI(2018)630336_EN.pdf).

⁶ Christian Hey. "EU Environmental Policies: A Short History of the Policy Strategies," in Stefan Scheuer (ed.), *EU Environmental Policy Handbook: A Critical Analysis of EU Environmental Legislation; Making It Accessible to Environmentalists and Decision Makers* (Brussels: European Environmental Bureau, September 2005), 18-23.

⁷ Ibid, 19-20.

⁸ Ibid, 20-23.

more.⁹ The Sixth EAP (2002-2012), “Environment 2010: Our Future, Our Choice”, concentrated on implementation through legal measures, achieving Kyoto targets, protecting biodiversity, and developing thematic strategies on air, waste, pesticides, soil, and urban sustainability.¹⁰

The Seventh EAP (2013-2020), “Living Well, Within the Limits of Our Planet”, illustrated the importance of low-carbon and resource-efficient economies, circular growth and precaution, and the “polluter pays” principle. It related this to stronger regulations from the European Commission and European Environment Agency (EEA).¹¹ The Eighth EAP (2021-2030) connects the European Union's Green Deal with six themes of climate action, resilience, regenerative, zero-pollution, biodiversity, and sustainable consumption supported by sustainable finance with a view to phase out fossil fuel use and key headline indicators to measure progress.¹²

Pakistan's Vulnerability to Climate Change and European Union's Support

As demonstrated by the Germanwatch Climate Risk Index 2025, climate change is a worldwide challenge in which Pakistan was ranked as the fifth vulnerable country to climate change¹³ because even while contributing as low as 0.88% to global emissions, Pakistan continues to frequently experience heatwaves, droughts, and floods.¹⁴ That is why Pakistan should look towards developed states for support in addressing environmental degradation as well as support in building climate resilience. The European Union as a supranational union is the main example of that support which manifests itself through capacity building and infrastructure development

⁹ Europa. “Fifth European Community Environment Programme: Towards Sustainability”. EUR-Lex, 24 September 1998. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=legissum:l28062>.

¹⁰ Europa. “Sixth Environment Action Programme”. EUR-Lex, 22 July 2002. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=LEGISSUM:l28027>.

¹¹ Didier Bourguignon. “Environment Action Programme Living Well, within the Limits of Our Planet.”

¹² European Commission, “Environment Action Programme to 2030”, 2022. https://environment.ec.europa.eu/strategy/environment-action-programme-2030_en.

¹³ Lina Adil, David Eckstein, *et al.* “Climate Risk Index 2025”.

¹⁴ Supreme Court of Pakistan, “Climate Change in Pakistan,” Climate Change Conference, 2024, 0-1. https://scf.gov.pk/Conference2024/downloads/Climate_Chage_in_Pakistan.pdf.

initiatives. But the reality is that while climate change may seem like a collective challenge, it affects the global south states unfairly.¹⁵

Chronological Sketch of EU-Pakistan Cooperation on Environmental Protection

1960s – 2010s

The initial communication of Pakistan with the EU began in the form of European Economic Community in 1960 which mostly focused on trade.¹⁶ From the first Common Commercial Agreement in 1976 which kickstarted the environmental cooperation¹⁷ to the 1986 CCA which extended this cooperation, their relations became deeply green in nature.¹⁸ When the EU was finally established under the Maastricht Treaty on 1 November 1993, Pakistan faced issues because the human rights clauses became strong in the agreements. Then, the military rule under General Pervez Musharraf further strained the already fragile ties. It was only until Pakistan supported the US led coalition in Afghanistan after 9/11 that the EU sought to repair its relations with Pakistan.¹⁹

Then during the 2000s, Commissioner Chris Patten visited Pakistan to raise aid to €100 million because of Pakistan's commitment to democratization.²⁰ The first country strategy paper's Article 177 and Council Regulation 443/92 outlined that the EU had to assist Pakistan in

¹⁵ Ayesha Malik. "The Climate Injustice Paradox: Why Pakistan Bears the Burden of a Crisis It Didn't Create." *Social Prism* 2, No.1 (2025): 16. <https://doi.org/10.69671/socialprism.2.1.2025.25>

¹⁶ JohnVogler. "The European Contribution to Global Environmental Governance," *International Affairs* 81, No. 4 (July 2005): 835–50. <https://doi.org/10.1111/j.1468-2346.2005.00487.x>.

¹⁷ "Commercial Cooperation Agreement between the European Economic Community and the Islamic Republic of Pakistan," *Official Journal of the European Communities* 19, No. L 168 (June 28, 1976): 5.

¹⁸ "Agreement for Commercial, Economic and Development Cooperation between the European Economic Community and the Islamic Republic of Pakistan," *Official Journal of the European Communities* 29, No. L 108 (April 25, 1986): 3. https://eur-lex.europa.eu/eli/agree_internation/1986/1196/oj.

¹⁹ Miguel Otero Iglesias. "The EU-Pakistan Relationship: Looking beyond the Trading Partnership," Elcano Royal Institute, May 14, 2015. <https://www.realinstitutoelcano.org/en/analyses/the-eu-pakistan-relationship-looking-beyond-the-trading-partnership/>.

²⁰ "EU Response to the 11 September: European Commission Action," Press Corner-European Commission, March 6, 2002. https://ec.europa.eu/commission/presscorner/detail/en/memo_02_122.

sustainable development and rural development²¹, and this changed the focus of assistance from infrastructure development to sustainable natural resource management and raised around €25.2 million for environmental rehabilitation in then NWFP and Punjab, €71 million for SAP, and €25 million for Rural Social Development.²² The Article 4 and 5 of the third CCA further stressed on the environmental cooperation such as pollution control, deforestation prevention, and sustainable resources in which the EU will set the standards and provide the research and training.²³ Then the most devastating earthquake of 7.6 magnitude of Pakistan's history struck on 8 October 2005 which killed 73,276, injured 69,260, and left 2.5 million homeless²⁴. The EU provided about €10 million in humanitarian aid for the relief of affected Pakistanis²⁵. Even though the Paris agreement outlined the need for climate finance, only 21% have been granted for the adaption activities in low income states.²⁶ In 2007, environmental degradation worsened in Pakistan due to the weaknesses in policy implementation.²⁷ This spurred the second CSP of Pakistan which adopted poverty reduction as the main goal along with natural resource management in then NWFP and Baluchistan²⁸ and for this EU provided €32 million.²⁹ In the first EU-Pakistan Summit of 2009, the leaders from both sides pledged €886 million for more projects on environment, poverty reduction, democratization,

²¹ "Pakistan Country Strategy Paper," *European External Action Service*, May 18, 2002, 1-4.

https://eeas.europa.eu/archives/docs/pakistan/csp/02_06_en.pdf.

²² Ibid, 24.

²³ "Cooperation Agreement on Partnership and Development Fields," 25.

²⁴ OCHA Situation Report No. 20 (05 November 2005).

²⁵ Directorate-General for humanitarian aid - DG ECHO, "Emergency Assistance to the Victims of the Earthquake of 8 October 2005 in Pakistan," European Commission, 2005. ECHO/PAK/BUD/2005/01000.

²⁶ Watkiss et al. 2023. "The Adaptation Finance Gap." In *Adaptation Gap Report 2023: Underfinanced. Underprepared. Inadequate Investment and Planning on Climate Adaptation Leaves World Exposed. The Adaptation Finance Gap Update 2023*, 58–64. Nairobi: United Nations Environment Programme. <https://doi.org/10.59117/20.500.11822/43796>.

²⁷ Country Strategy Paper for 2007-2013, European External Action Service, (2007), 13. https://www.eeas.europa.eu/sites/default/files/csp-pakistan-2007-2013_en_0.pdf.

²⁸ Ibid, 4.

²⁹ Ibid, 14.

rural development, and education³⁰, while the second Summit of 2010 agreed to build Pakistan's capacity to tackle the effects of climate change.³¹

2011 – 2023

In 2011, with the joint support of the EU, and WWF-UK, LEAD Pakistan launched *Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan* (CCAP) to preserve the coastal areas of Pakistan and prevent land degradation and water shortages, a venture that was never seen before.³² The 5-year engagement programme between Pakistan and the EU enhanced cooperation in agriculture, technology, storage, and R&D. The programme also contributed in environmental protection through food security, water management, and flood safety³³ which prompted Pakistan further to ratify 27 conventions on human rights, labour, environment, and governance and gain GSP+ status³⁴. It increased Pakistan's exports to €8.0 billion, €6.2 billion of which was only due to GSP+.³⁵ The expectations of decarbonization by the developed states in the EU for global south nations is an unfair demand since their economic growth is mostly based on carbon emission themselves³⁶, but, still, under the 2014 Multi-Annual Indicative Programme, the EU raised €340 million for the marginalized areas like the mountainous regions of Khyber Pakhtunkhwa (formerly NWFP), FATA and Balochistan and semi-desert districts of inner Sindh and South Punjab, because they lack the resources for sustenance and are exposed to climate

³⁰ Council of the European Union, "EU – Pakistan Summit: Joint Statement," 16 June 2009. https://www.consilium.europa.eu/uedocs/cms_data/docs/pressdata/en/declarations/108562.pdf.

³¹ Council of the European Union, "Second EU – Pakistan Summit: Joint Statement," 4 June 2010. https://www.europarl.europa.eu/meetdocs/2009_2014/documents/dsas/dv/council_2-eu-pkst/_council_2-eu-pkst_en.pdf.

³² "Report on Building Capacity on Climate Change Adaptation Launched," *Business Recorder*, 1 March 2013. <https://www.brecorder.com/news/4068540>.

³³ "EU-Pakistan 5-Year Engagement Plan," European External Action Service, (2012), 4. https://www.eeas.europa.eu/delegations/pakistan/eu-pakistan-five-year-engagement-plan_en.

³⁴ Sadia Khattak. "The European Union's External Relations: Example of EU and Pakistan," *Sciences de l'Homme et de La Société* (SHS), 20 February 2020: 213-214. https://theses.hal.science/tel-03287516v1/file/pdfa_10Qlp6vy.pdf.

³⁵ "Monitoring Missions and Priorities in Pakistan," GSP Hub. European Union, 31 March 2025. <https://gsphub.eu/country-info/Pakistan>.

³⁶ S. A. Hussain *et al.* "The Perspective of Energy Poverty and the First Energy Crisis of Green Transition," *Energy* 275 (15 July 2023). <https://doi.org/10.1016/j.energy.2023.127487>.

calamities and terrorism.³⁷ Furthermore, in 2016, Pakistan and the EU signed two projects of worth 59 million euros. They were International Labour and Environmental Standards Application in Pakistan's SMEs (ILES) to improve the safety and working conditions of labourers and Balochistan Rural Development and Community Empowerment Programme.³⁸ Another project that was funded for the water and land improvement was Revival of Balochistan Water Resources Programme (RBWRP) for a duration of 6 years.³⁹ In 2019, to show further commitment to this cause, the EU and Pakistan's Finance Ministry signed two agreements worth €115 million; one was Development through Enhanced Education Programme (DEEP) to increase access of education in the rural areas and other one was Growth for Rural Advancement and Sustainable Progress (GRASP) which focused on economic development.⁴⁰ One of the most detailed agreements which was signed between the EU and Pakistan in 2019 was the Strategic Engagement Plan (SEP) which became the foundation of peace development and prosperity. It promoted cooperation in sectors such as democracy, human rights, energy, and environment. Clause V especially highlighted green growth, circular economy, and collaboration in clean air, waste, water, biodiversity, and food security.⁴¹

In the 11th EU-Pakistan Joint Commission on 16 June 2021, the EU informed Pakistan about the European Green Deal, which is the EU's plan to achieve climate neutrality by 2030 through various environmentally friendly initiatives. Pakistan apprised the EU of the ongoing climate related projects including eco-system restoration, green stimulus, and national

³⁷ European Commission, "EU – Pakistan Multi-Annual Indicative Programme (MIP)," (2014), 1-29. https://international-partnerships.ec.europa.eu/document/download/928403a5-38e0-4c8a-be6e-06f5ea606f5f_en.

³⁸ EEA, "European Union and Government of Pakistan Sign Two Financing Agreements," 29 June 2016. https://www.eeas.europa.eu/node/13106_en.

³⁹ "EU Delegation Provides Technical Assistance for Water and Land Management in Balochistan," 24 October 2018. https://www.eeas.europa.eu/node/52697_en.

⁴⁰ "European Union's New Support to Education, Rural Development, and Democratic Institutions," 2019. https://www.eeas.europa.eu/pakistan/eu-projects-pakistan_en?s=175.

⁴¹ "EU-Pakistan Strategic Engagement Plan (SEP)," European External Action Service, (June 2019), 1-6. https://www.eeas.europa.eu/sites/default/files/eu-pakistan_strategic_engagement_plan.pdf.

electric vehicle policy⁴², which was further extended by the second MIP⁴³ and guided Pakistan's priorities that were (i) Green Inclusive Growth, (ii) Human Capital, and (iii) Governance, including Rule of Law and Human Rights.⁴⁴ It also saw the implementation of international conventions on human rights, labour rights, environmental protection, and good governance under GSP regulations.⁴⁵ The Team Europe Initiative (TEI) which will further help Pakistan in sustainable development by creating green jobs in farming, forestry, and any job that will protect the natural resources.⁴⁶ The financial support for the period of 2021 to 2024, was €172 million.⁴⁷ Despite all this, the EU faced internal challenges in its climate leadership because of economic differences among its own members and resistance from the polluters who are powerful.⁴⁸ While the EU not only helps Pakistan with large-scale environmental protection, it was also the first to provide disaster relief aid worth €23 million to the areas affected by the floods in 2022. During the 12th EU-Pakistan Joint Commission, the EU introduced the €300 billion Global Gateway strategy⁴⁹, and since its initiation it has mobilized €306 billion and has created many jobs which is another opportunity for Pakistan to work closely with the EU.⁵⁰ One thing worth noticing is that the EU's CBAM(Carbon Border Adjustment Mechanism) initiative can be a source of concern for Pakistani exporters because the EU regularly uses renewable energy as a trade barrier and

⁴² "EU-Pakistan Joint Commission hold 11th Meeting," Ministry of Foreign Affairs, Government of Pakistan, June 16, 2021. <https://mofa.gov.pk/pakistan-eu-joint-commission>.

⁴³ "EU – Pakistan Multi-Annual Indicative Programme: 2021 - 2027", 5. https://international-partnerships.ec.europa.eu/system/files/2022-01/mip-2021-c2021-8992-pakistan-annex_en.pdf.

⁴⁴ Ibid, 11.

⁴⁵ Ibid, 5.

⁴⁶ Ibid, 12-13.

⁴⁷ Ibid, 38.

⁴⁸ Dennis Tänzler *et al.* "EU Climate Change Diplomacy in a Post-Covid 19 World," July 2021. [https://www.europarl.europa.eu/RegData/etudes/STUD/2021/653643/EXPO_STU\(2021\)653643_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/653643/EXPO_STU(2021)653643_EN.pdf).

⁴⁹ "EU and Pakistan hold 12th Joint Commission Meeting," European Union External Action, 10 October 2022. https://www.eeas.europa.eu/node/421132_fr.

⁵⁰ Mucahit Anvioglu. "EU Aims to Mobilize over \$464B in Investments through Its Global Gateway Program," (2025). <https://www.aa.com.tr/en/europe/eu-aims-to-mobilize-over-464b-in-investments-through-its-global-gateway-program/3712344>.

Pakistani industries mostly rely on coal power⁵¹. World Bank's CBAM Exposure Index argued that Pakistan's electricity sector produced more carbon than the EU countries which made it difficult for Pakistan to invest in environment protection projects. The climate budget in 2021-2022 was PKR 14,327 million but then it fell down to PKR 4,050 million in 2024-2025. Hence, any long term environmental plans have not been successful.⁵² The annual action plans of 2022 and 2023, respectively, were EU-funded plans to assist Pakistan in its fight against climate change and had highlighted projects and programmes for the protection of the environment and sustainable development, while aligned with the priorities of the EU's Global Gateway Strategy.⁵³ Since the EU is committed to making Pakistan a stable, democratic, and sustainable climate climate-resilient country, it contributes €100 million in grants annually for the development and cooperation to achieve the Sustainable Development Goals (SDGS).⁵⁴

The EU, being a major supporter of environment protection, has its own shortcomings as well like how the EU failed to submit their Nationally Determined Contributions (NDC) by September 2025, which is huge because the EU along with the USA accounts for over 40% of the historical emissions⁵⁵. This actually mares the credibility of the EU's climate policies.

Impacts of the EU Funds on Pakistan's transition to Renewable Energy ***Pakistan's Dependence on Fossil Fuels***

Even though Pakistan is facing electricity shortages and long periods of load shedding, the energy sector of Pakistan is heavily reliant on fossil fuels for its electricity production. As the World Bank's statistic in 2022 suggested, this reliance accounted for 63.9% of the total energy consumption of the

⁵¹ Maryam Khan. "Pakistan and the Global North's Climate-Linked Trade Policy," *The Diplomat*, June 21, 2024. <https://thediplomat.com/2024/06/pakistan-and-the-global-norths-climate-linked-trade-policy/>.

⁵² Furqan Ali and Arfa Ijaz. "Carbon Levy: A Fail-Safe?" *The News International*, 19 April 2025. <https://www.thenews.com.pk/print/1302800-carbon-levy-a-fail-safe>.

⁵³ Ahsan Iqbal, "Foreward" in *Annual Action Plan for Pakistan, 2022 – 2023*. Planning Commission, GoP, June 2022. https://pc.gov.pk/uploads/annualplan/Annual_Plan_2022-23.pdf.

⁵⁴ Delegation of the European Union to Pakistan, "EU Projects with Pakistan," EEA Service, 29 July 2021. https://international-partnerships.ec.europa.eu/countries/pakistan_en.

⁵⁵ Akshee Thakur. "Developed Nations Fail to Lead Action against Climate Change," *The Tribune*, 25 October 2025. <https://www.tribuneindia.com/news/india/developed-nations-fail-to-lead-action-against-climate-change/>.

country⁵⁶ out of which 27% is from natural gas, 17% is from oil, and 19% is from coal. This reliance on fossil fuels lead to significant consequences for the environment and it is detrimental for the overall human well-being. The other sources for energy generation are nuclear energy (9%) and from renewables like water and wind (8%). Pakistan's energy demand is high; hence, this number will grow with population and economy, which is why Pakistan's transition to renewable energy sources is essential to reduce the environmental impact.⁵⁷

Energy is the backbone for any process of production, and it needs to be secured, stored, and saved by the nations for their economic growth⁵⁸. That is why Pakistan is pressured to create energy policies, and renewable energy takes the central position in all this because it is made from the local sources like wind, water, and solar.⁵⁹ The issue is that Pakistan depends on conventional processes to maintain the flow of electricity that often leads to overstating demand and wastage. All of which goes into unnecessary payments for power plants. While there may be challenges, new methods, such as small power producers, smart grids, renewables, batteries, etc., will also contribute to the electricity supply⁶⁰. With help from the EU, Pakistan can achieve cleaner and affordable energy. Since the 1980s, the country moved toward market-based electricity, and in 2019, it introduced a policy for cheaper renewable energy called Alternative and Renewable Energy (ARE)⁶¹. And through the EU's assistance Pakistan can introduce more policies like Fast Track Solar PV Initiatives 2022 that encouraged the use of solar power on 11 kV local power lines and the National Electricity Plan 2023–2027 that aims to generate 40% of the electricity from renewable sources by 2025 and 60% by 2030.⁶²

⁵⁶ World Bank, "Fossil Fuel Energy Consumption (% of Total) – Pakistan," 2024. <https://data.worldbank.org/indicator/EG.USE.COMM.FO.ZS?locations=PK>.

⁵⁷ Ayesha Sadiqa, Ashish Gulagi, and Christian Breyer. "Energy Transition Roadmap towards 100% Renewable Energy and Role of Storage Technologies for Pakistan by 2050," *Energy* 147 (March 15, 2018): 518 – 33. <https://doi.org/10.1016/j.energy.2018.01.027>.

⁵⁸ Fazil Gökgöz and Mustafa Taylan Güvercin. "Energy Security and Renewable Energy Efficiency in EU," *Renewable and Sustainable Energy Reviews* 96 (November 2018): 226, <https://doi.org/10.1016/j.rser.2018.07.046>.

⁵⁹ Ibid, 226.

⁶⁰ Muhammad Sadam Hussain, Kangwook Cho, and Soo-jin Park. "Resource Adequacy and Integration of Renewables in Light of US, EU and Pakistan's Evolving Power Sector," *Energies* 17, No. 20 (October 11, 2024): 4 - 8. <https://doi.org/10.3390/en17205051>.

⁶¹ Ibid, 14.

⁶² Ibid, 16.

Furthermore, it is believed that by 2050, 50% of the world's energy supply will come from renewables because fossil fuels are unsustainable and are rapidly depleting. One technology that is being talked about a lot is decentralized renewable energy systems which argues that instead of relying on huge power plants, renewable energy should be generated in small and local set ups like on the roof tops of houses or farms⁶³. This can prevent Pakistan from spending too much money on setting up these big power plants.

Pakistan needs a lot of energy to keep its households and industries running and even keep its development on track⁶⁴, which is why a developing state like Pakistan has realized that the key to maintain prosperity and sovereignty is to independently produce energy through renewables. This will also keep climate change from getting worse.⁶⁵

EU Contribution in the transition to Renewable Energy

The EU has always been a big supporter of Pakistan in its efforts to transition to renewable energy sources. The early mentions of it can be found in the third CCA in 2004 when the EU under its article 10 agreed with Pakistan that energy was important for both the economy and people's sustenance.⁶⁶ In 2024, the EU launched a new program called Energy Plus with the Aga Khan Foundation (AKF) which aimed to increase the access of 350,000 people in Gilgit-Baltistan and Chitral to clean energy. It is a huge project that will improve the livelihoods of rural people in these areas.⁶⁷ In

⁶³ M. Ashraf Chaudhry, R. Raza and S.A. Hayat. "Renewable Energy Technologies in Pakistan: Prospects and Challenges," *Renewable and Sustainable Energy Reviews* 13, No. 6 (August 2009): 1658. <https://doi.org/10.1016/j.rser.2008.09.025>.

⁶⁴ Shah Rukh Shakeel, Josu Takala, and Waqas Shakeel, "Renewable Energy Sources in Power Generation in Pakistan," *Renewable and Sustainable Energy Reviews* 64 (October 2016): 422. <https://doi.org/10.1016/j.rser.2016.06.016>.

⁶⁵ Irfan Afzal Mirza, Sana Ahmed and M. Shahid Khalil, "Renewable Energy in Pakistan: Opportunities and Challenges," *Science Vision* 16 & 17 (January 2010 – Dec 2011): 13 - 14. https://www.sciencevision.org.pk/BackIssues/Vol16_Vol17/02_Vol16_and_17_RenewableEnergy%20in%20Pakistan_IrfanAfzalMirza.pdf.

⁶⁶ "Cooperation Agreement on Partnership and Development Fields," 25.

⁶⁷ "Energy Cooperation Agreement on Partnership and Development Fields Plus: AKF and EU to Improve Access to Clean Energy in Northern Pakistan," Aga Khan Development Network. 2024. <https://the.akdn/en/resources-media/whats-new/spotlights/energy-plus-akf-and-eu-to-improve-access-to-clean-energy-in-northern-pakistan>. Also see EU Delegation to Pakistan, "Press Release: European Union Provides EUR 87 Million to Strengthen Green Inclusive Growth and Employable Workforce,"

the EU-Pakistan summit of 2009, the EU was praised because of its commitment to Pakistan's transition. With the assistance of European Investment Bank (EIB) and other donors, the EU is focused on building hydroelectric power plants in Pakistan⁶⁸, the same goal was promoted and discussed at the 2010 EU-Pakistan Summit that it was essential to have safe, secure, affordable, and sustainable energy.⁶⁹ To achieve this, they planned to create an action program through Friends of Democratic Pakistan (FoDP) Energy Task Force and set up a regulatory framework that will attract companies to invest in energy projects.⁷⁰

To take this energy cooperation up a notch, the EU in its SEP with Pakistan in 2019 decided that they will be cooperating with Pakistan in the areas such as renewable energy generation and consumption, green technologies, energy efficiency, smart grids, clean coal technology, energy security, and energy research and innovation. They will also join hands to work on global initiatives like "Sustainable Energy for All" launched by the UN Secretary General along with that they will encourage the corporate sector to assist in joint ventures of hydroelectric and thermal power and that they will also stay updated with the developments on energy in the international system to help Pakistan.⁷¹ In the 14th EU-Pakistan Commission meeting, the EU and Pakistan agreed to continue their cooperation on the emerging threats like food insecurity, energy security, and climate change, with a particular focus on trade, migration, human rights, political, economic and development cooperation under the Global Gateway Strategy⁷². All of these sectors are really important for Pakistan's sustainable development. The EU understands the importance of this transition and is willing to support Pakistan in the integration of renewable

⁶⁸ https://www.eeas.europa.eu/delegations/pakistan/press-release-european-union-provides-eur-87-million-strength-green-inclusive-growth-and-employable_en.

⁶⁹ "EU-Pakistan Summit 2009 – Joint Statement." 17 June 2009. <https://data.consilium.europa.eu/doc/document/ST-11117-2009-INIT/en/pdf>

⁷⁰ "Second EU-Pakistan Summit – Joint Statement." 04 June 2010. https://www.europarl.europa.eu/meetdocs/2009_2014/documents/dsas/dv/council_2-eu-pkst/_council_2-eu-pkst_en.pdf.

⁷¹ Visit at <https://mofa.gov.pk/press-releases/friends-of-democratic-pakistan-forum>.

⁷² "EU-Pakistan Strategic Engagement Plan (SEP)", 4.

⁷³ INP, "Pakistan, EU Agree to Continue Cooperation on Emerging Challenges of Food, Energy Security," *Pakistan Today*, 13 December 2024. <https://profit.pakistantoday.com.pk/2024/12/13/pakistan-eu-agree-to-continue-cooperation-on-emerging-challenges-of-food-energy-security/>.

energy in its industries such as Implementation of Resource and Energy Efficient Technologies in the Sugar Sector of Pakistan. It is a SWITCH-Asia project funded by the EU whose objective is to alleviate poverty and mitigate the effects of climate change by enhancing the energy efficiency in the sugar factories where the use of electricity is a lot.⁷³

Overall, the EU's financial and technical assistance has proven beneficial to Pakistan in implementing its national climate policies, nationally determined Contributions (NDCs), and projects under the SDGs. And in the workshop of Ten Billion Trees Tsunami Program in 2021, Mr. Mahmood Akhtar Cheema (IUCN Pakistan Representative) showed his appreciation to the German Federal Ministry for Economic Cooperation and Development (BMZ) and KfW, which was a German development bank, for their full financial support.⁷⁴

Prospects of EU-Pakistan Cooperation on Environmental Protection

The EU's cooperation in Pakistan is based on the objectives of the Paris agreement and the UN's sustainable development goals. Another major reason one cannot ignore is that the EU emphasizes on the use of soft power especially through its developmental policies globally though more in the Asian region. As Javier Solana said in 2007 that the EU had become a major economic power in Asia and it was on its way to become a political power as well⁷⁵, which proved to be true in the last decade. Pakistan is one of the most important locations for the EU's investment because the real GDP of Pakistan grew by 2.38% in the fiscal year of 2024 as compared to the fiscal year of 2023. This is because the main contributor was the agriculture sector, which grew by 6.25%, the highest in the last 19 years, a positive growth of 1.21% was seen in the industrial sector as well because

⁷³ "Implementation of Resource and Energy Efficient Technologies (IREET) in the Sugar Sector of Pakistan," European External Action Service, August 26, 2020. https://www.eeas.europa.eu/delegations/pakistan/implementation-resource-and-energy-efficient-technologies-ireet-sugar-sector-pakistan_und_en.

⁷⁴ Hammad Saeed. "National Workshop on MIS/Log-Frame of the Ten Billion Trees Tsunami Programme Kicks off in Islamabad," International Union for Conservation of Nature, 15 November 2021. <https://iucn.org/news/pakistan/202111/national-workshop-mislog-frame-ten-billion-trees-tsunami-programme-kicks-islamabad>.

⁷⁵ Javier Solana Speech delivered at Keio University, Tokyo on 24 April 2006 cited in Deepening EU - Japan Cooperation (Jan 2024). https://www.europarl.europa.eu/RegData/etudes/IDAN/2024/754443/EXPO_IDA%282024 %29754443_EN.pdf.

of manufacturing and construction.⁷⁶ Furthermore, the World Economics estimates Pakistan's GDP to be at \$2.06 trillion in PPP terms in 2025 and at \$2.119 trillion for 2026.⁷⁷

One needs to understand that the EU has geopolitical and strategic goals in the region of Asia, as shown by its continuous sanctions on human rights violators in countries like Myanmar and Cambodia.⁷⁸ Their development policy is guided by the principles of human rights, the rule of law, good governance, and democracy, with the main objective being poverty alleviation.⁷⁹

- The EU's first strategic interest is the development of diplomacy. To increase its geopolitical interest and increase its aid, the EU has always relied on soft power to resolve the developmental issues faced by the developing states.⁸⁰ One can say that a new form of public diplomacy has been developed which is used by the EU to pursue its foreign policy goals through the donation of aid with the partner countries. This creates a softer image of the donor state in the eyes of the receiver state who sees the donor state as a new market for their goods.⁸¹
- The second strategic interest is achieving the SDG target; the prospects are high for the EU-Pakistan cooperation on environmental protection because the EU wants to become a global leader by fulfilling the targets of SDGs in these developing or third states.⁸²
- The third strategic interest is that the EU also never stays far away from influencing the regional organizations as well such as the Association of Southeast Asian Nations (ASEAN)⁸³, and the EU being an observer in the

⁷⁶ Ministry of Finance, Government of Pakistan, "Pakistan Economic Survey," Printing Corporation of Pakistan Press, 2023, 3-4. https://www.finance.gov.pk/survey/chapter_24/Highlights.pdf.

⁷⁷ "Pakistan GDP (PPP) Time Series," *World Economics*, 2024, <https://www.worldeconomics.com/GDP/Pakistan.aspx>.

⁷⁸ Hanna Deringer, Hosuk Lee-Makiyama, and Danny Murty. "Europe and South-East Asia: Shifting from Diplomacy to Unilateralism," European Centre for International Political Economy, Policy Brief No. 1 (2019), 8. <https://www.econstor.eu/handle/10419/202513>.

⁷⁹ Simant Shankar Bharti. "The EU Development Policy as a Model: An Implication for South Asian Countries," *Humanities and Social Sciences Research Journal* 29, No. 2 (2022): 21.

⁸⁰ Ibid, 21.

⁸¹ Ibid, 20.

⁸² Ibid, 21.

⁸³ Ibid, 19.

South Asian Association for Regional Cooperation (SAARC), it also keenly follows the activities in the region of South Asia.⁸⁴

- The fourth strategic interest is to become a normative power by actively trying to establish new norms, values, and rules which challenge the status quo. It provides new avenues of opportunities for the developing states and the EU itself to pursue their economic interests.⁸⁵
- The fifth strategic interest is the promotion of human rights in these developing states. The EU's framework for human rights includes dialogue, guidelines, consultations, democracy clauses, programmatic support, election observation missions, Common Security and Defence Policy, trade tools, declarations, and sanctions.⁸⁶
- The sixth strategic interest relates to security. The rise of extremism and terrorism presents a worrisome situation for the EU, especially, in the case of south Asia because of the volatile circumstances in Afghanistan. Pakistan has been affected by the Afghan conflict the most, and being a neighbour, Pakistan faces the brunt of the chaos on its western frontie.⁸⁷ Together, these two countries create a complex security dynamic that can have consequences for both the regional and international levels.⁸⁸
- The seventh strategic interest here is the consumer market; the region of South Asia has shown an amazing increase in purchasing power parity, which has made it the largest consumer market with resources and a cheap labor force. It prompted the EU to create closer ties with the countries here.⁸⁹

Lessons Learned for Developing Nations

- Just like how the EU uses its Generalised Scheme of Preferences Plus (GSP+) to promote sustainable practices in trading and provide trade

⁸⁴ Simant Shankar Bharti. "The European Union's Security Concerns and EU-South Asia Cooperation," *Scientific Journal of the Radom Academy of Economics* 6 (2021): 13.

⁸⁵ KatherineVadura. "The EU as 'Norm Entrepreneur' in the Asian Region: Exploring the Digital Diplomacy Aspect of the Human Rights Toolbox," *Asia Europe Journal* 13 (May 14, 2015): 352. <https://doi.org/10.1007/s10308-015-0420-3>.

⁸⁶ Ibid, 353.

⁸⁷ Nasreen Akhter. "Pakistan, Afghanistan, and the Taliban," *International Journal on World Peace* 25, No. 4 (2008): 69–70. <http://www.jstor.org/stable/20752859>.

⁸⁸ Bharti, "The European Union's Security Concerns and EU-South Asia Cooperation", 16.

⁸⁹ Ibid, 14.

incentives to states that ratify 27 international conventions, similarly, developing states should leverage frameworks to promote and encourage organizations and the corporate sector to adopt green activities.

- The EU institutions such as the European Investment Bank⁹⁰ and the European Environment Agency⁹¹ follow a strict organizational SOP that makes it easier for them to tackle environmental and climate challenges and enforce regulations to manage the natural resources sustainably. The same strategy should be employed by the developing states in building robust institutions that can assist government in environmental initiatives.
- The EU has always promoted the importance of development projects with environmental protection for long term sustainability. This should be adopted by the developing states because in pursuit of their economies they often disregard the importance of sustainable management of resources which can be detrimental for the economy in the long term, which is why developmental policies should have environmental protection clauses.
- To promote joint research capacities, developing states should collaborate with the think tanks, universities of the EU member-states through their own think tanks, organizations, and universities. The EU should provide scholarships, exchange programs to Pakistani students that especially targets the environment and development related sectors such as the Helmut-Schmidt-Programme (Master's Scholarships for Public Policy and Good Governance - PPGG)⁹² that is specifically for the developing states only.
- The EU and other developing states should have a joint partnership program on environmental protection or to combat climate change like the EU-India Clean Energy and Climate Partnership⁹³ that provides guidelines especially for climate action activities only. This can facilitate

⁹⁰ European Investment Bank, "The EIB Group." <https://www.eib.org/en/about/group> (Accessed May 17, 2025).

⁹¹ European Environment Agency, "Who We Are." <https://www.eea.europa.eu/en/about/who-we-are> (Accessed May 17, 2025).

⁹² "Helmut-Schmidt-Programme (Master's Scholarships for Public Policy and Good Governance)," German Academic Exchange Service (DAAD). <https://www2.daad.de/deutschland/stipendium/datenbank/en/21148-scholarship-database/?detail=50026397> (Accessed May 17, 2025).

⁹³ India-EU Clean Energy and Climate Partnership, <https://www.cecp-eu.in/>. (Accessed May 17, 2025).

dialogues and the transfer of green technologies needed for sustainable development.

Conclusion

The main purpose of this research was to explore the cooperation of the EU and Pakistan on environmental protection in Pakistan. This article covered the span of 30 years. All the relevant literature has been searched and analyzed but most of that only covered the broad topics like the EU-Pakistan trade relations or their security relations. While there is some mention of their climate-related cooperation, it is not in much detail and which is why through this research, a detailed timeline has been given that traces their environmental relations from 1990s until 2023.

Through this research, it was established that the EU climate funds have a significant impact on Pakistan's climate resilience, water management, rural development, renewable energy transition, and post-disaster recovery. Not only this, but Pakistan also collaborated in initiatives like "Building Back Better through Green Jobs Creation" and "Punjab Urban Water and Wastewater Governance and Services Improvement" which combine the EU support with Agence Française de Développement (AfD) to tackle urgent issues of water sanitation and drinking water delivery in Lahore and Faisalabad and other parts of Punjab, all under the guidance of Team Europe Initiative.⁹⁴ All of this and many more have contributed to Pakistan's efforts to achieve sustainable development. The EU is in the right direction with its sustainable development methods, which can potentially assist many countries in their fight against Climate change.⁹⁵

This research fills a significant academic gap in the study of the EU's environmental governance in Pakistan. It also draws lessons from their 3 decades of cooperation with both Pakistan and other developing states so that these strategies can be employed to protect their natural resources,

⁹⁴ "Team Europe Signs a Strategic Agreement to Address Climate Challenges in Punjab," European External Action Service, (13 December 2023). https://www.eeas.europa.eu/delegations/pakistan/team-europe-signs-strategic-agreement-address-climate-challenges-punjab_en.

⁹⁵ Tasawar Hussain and Ramisha Siddiqui. "An Analysis of the EU Assistance to Pakistan in the Wake of Climate Change with a Focus on Monsoon Flooding," *Journal of European Studies* 39, No. 2 (July 4, 2023): 73. <https://doi.org/10.56384/jes.v39i2.315>.

gather funds from their international partners and, contribute significantly to the global climate action efforts.