

**SUSTAINABLE TOURISM DEVELOPMENT: THE
INVOLVEMENT OF TRANSNATIONAL ACTORS IN
THE IMPLEMENTATION OF STREAM PROJECT
IN PANGANDARAN TO RESPOND
CLIMATE CHANGE 2011-2014**

***(PEMBANGUNAN PELANCONGAN MAMPAN: PENGLIBATAN
PIHAK-PIHAK BERKEPENTINGAN TRANSNASIONAL DALAM
PELAKSANAAN PROJEK STREAM DI PANGANDARAN UNTUK
BERTINDAK BALAS PERUBAHAN IKLIM 2011-2014)***

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Abstract

Pangandaran is one of the tourist destinations in Indonesia which was affected by the tsunami in 2006 due to its vulnerability to climate change. Seeing the achievement of the previous project (2006-2010) in responding the impact of tsunami in Pangandaran, therefore, 'Sustainable Tourism through Energy Efficiency with Adaptation Mitigation Measures' (STREAM) in Pangandaran as project of joint collaboration between Indonesia under the Ministry of Tourism and Creative Economy with the UNWTO Consulting Unit on Tourism and Biodiversity have been agreed to establish the project in 2011 until 2014 as the continuation of the previous project in Pangandaran through a practical of sustainable tourism to address the solution in the fight against climate change. This joint collaboration involves the transnational actors such as Indecon, IESR, adelphy, and local participation with significant roles in implementing the sustainable tourism development to respond ecological crisis and climate change in Pangandaran. The research of this paper aims to describe the involvement of transnational actors in the implementation of STREAM project as a joint collaboration project between Indonesia and UNWTO in respond to climate change by sustainable tourism with energy efficiency, adaptation and mitigation measure. This research is written using qualitative method in analyzing the case chosen and in gathering all the data needed, with the combination from descriptive analytical research method to elaborate the primary sources. The result of this analysis will explain how the transnational actors involved in the implementation of STREAM as pilot project that can contribute to respond climate change through sustainable tourism to be replicated in other destinations in Indonesia and beyond.

Keywords: STREAM, Transnational Actors, Joint Collaboration, Sustainable Tourism, Climate Change

Abstrak

Pangandaran adalah salah satu destinasi pelancongan di Indonesia yang terjejas oleh tsunami pada tahun 2006 akibat kerentanannya terhadap perubahan iklim. Melihat

pencapaian projek sebelum ini (2006-2010) dalam menanggapi impak tsunami di Pangandaran, oleh itu, 'Pelancongan Berkelanjutan melalui Kecekapan Tenaga dengan Langkah Mitigasi Adaptasi' (STREAM) di Pangandaran sebagai projek kerjasama bersama antara Indonesia di bawah Kementerian Pelancongan dan Ekonomi Kreatif dengan Unit Perundingan UNWTO Mengenai Pelancongan dan Biodiversiti telah bersetuju untuk menubuhkan projek pada tahun 2011 hingga 2014 sebagai penerusan projek sebelumnya di Pangandaran menerusi praktik pelancongan yang mampan untuk menangani penyelesaian dalam memerangi perubahan iklim. Kerjasama bersama ini melibatkan pelaku transnasional seperti kita Indecon, IESR, adelphy, dan penyertaan tempatan dengan peranan penting dalam melaksanakan pembangunan pelancongan mampan untuk menanggapi krisis ekologi dan perubahan iklim di Pangandaran. Penyelidikan kertas kerja ini bertujuan untuk menggambarkan penglibatan pelakon transnasional dalam pelaksanaan projek STREAM sebagai projek kerjasama bersama antara Indonesia dan UNWTO dalam menanggapi perubahan iklim melalui pelancongan lestari dengan kecekapan tenaga, penyesuaian dan langkah mitigasi. Penyelidikan ini ditulis menggunakan kaedah kualitatif dalam menganalisis kes yang dipilih dan dalam mengumpulkan semua data yang diperlukan, dengan kombinasi dari kaedah penyelidikan analitis deskriptif untuk menghuraikan sumber utama. Hasil dari analisis ini akan menjelaskan bagaimana pelaku transnasional terlibat dalam pelaksanaan STREAM sebagai projek perintis yang dapat menyumbang untuk merespon perubahan iklim melalui pelancongan lestari yang akan direplikasi di destinasi lain di Indonesia dan seterusnya

Kata Kunci: *STREAM, Pihak-Pihak Berkepentingan Transnasional, Kerjasama Bersama, Pelancongan Mampan, Perubahan Iklim.*

INTRODUCTION

The relationship between tourism and climate change has unique characteristics. Climate change is not a remote event for tourism, but it has become a phenomenon that affects certain sectors and destinations in particular, mountainous areas and coastal areas. At the same time, the tourism sector contributes to greenhouse gas (GHG) emissions, primarily through the transportation of tourism sector activities (UNWTO, Climate Change and Tourism, 2017). It can be said that precisely the most popular tourist destinations of tourists, will most likely experience significant increases in greenhouse gas emissions (Buckley, Tourism and Climate Change: Risks and Opportunities., 2008).

According to the United Nations World Tourism Organization (UNWTO) and United Nations of Environmental Programme (UNEP), the total share of tourism in carbon emission in the world is amount as 5%. Regarding the close links between climate change and tourism issues, UNWTO has initiated the Davos Process for Tourism and Climate Change in 2007, as a respond to climate change and to engage tourism stakeholders in the climate challenge, outlining a clear commitment to action to adapt to changing conditions of climate, reduce emissions, develop and implement new technologies and secure funding to help developing and poor regions and countries (UNWTO, Climate Change and Tourism, 2017).

Developing countries such as Indonesia with its richness in nature, biodiversity and culture, considered tourism as a big potential and one of its leading producers of foreign exchange (Indonesia M. o., World Tourism Organization, 2012). In 2013, based on World Economic Forum survey, Indonesia got tourism competitiveness index score with 4.0 and rank at number 70 (up from number 74 in 2011 and number 81 in 2009) from 140 countries. This has proved that Indonesia is very concerns towards its tourism growth. However, there are also some aspects needs to be improved, which are tourism and Information Communication Technology (ICT) infrastructures, health and hygiene, environmental sustainability, and affinity for travel and tourism (Forum, World Economic Forum: The Travel & Tourism Competitiveness Report 2013., 2017).

Indonesia has developed sustainable tourism for its tourism development. Indonesia commitment sustainable tourism development has been stated through the policy of National Development Plan 2005-2025: "Tourism Development must also be based on principles that tourism must protect and conserve environment holistically.", and in Tourism Act, Law no. 10 Year or 2009, which "Sustainability must encompass the natural, social economic, and cultural environment." within the implication: (1) tourism destination development must be based on sustainability; (2) social and economic benefits may derived from tourism area without destructing the environment and local cultures; (3) tourist behavior and code of ethics of tourism from an integral part in realization of sustainable development (Nirwandar, 2014). Indonesia policy towards sustainable tourism adopts the UNWTO's Global Code of Ethics for Tourism, a set of principles of fundamental frame for responsible and sustainable tourism designed to guide key-players in tourism development (Kemenpar, 2017).

Besides Indonesia's commitment to sustainable tourism, regarding to climate change, the Government of Indonesia has also made a non-binding commitment to reduce its greenhouse gas (GHG) emissions by 26% by 2020 from its 'business-as-usual' and a further reduction of up to 41% in case of international financial support, the largest absolute reduction commitment made by any developing country (Indonesia S. , Tentang | Latar Belakang, 2013).

For Indonesia, in order to enhance tourism development as one of its prominent sectors, cooperation in international forums such as UNWTO is crucial, especially for collaborative training, capital investment and exchange experience. This has directly described how the non-state actors such us intergovernmental organization have significant influence in order to help state's development according to the needs and interests that meets by the actors involved, for example in providing cooperation or collaboration between states or non-state actors towards sustainable tourism development (Indonesia M. o., World Tourism Organization, 2012). Moreover, sustainability is now a ubiquitous term used by governments, the business sector, NGOs, and international organizations. For IGOs and NGOs, as agitators for environmental action, architects of governance solutions, and entrepreneurs for new sorts of initiatives, they have been critical in shaping and directing the international community's response to global environmental challenges (O'Neill, 2015).

One of the examples of cooperation between Indonesia and UNWTO in the field of tourism that supports sustainable development is the collaboration project of "Sustainable Tourism through Energy Efficiency with Adaptation and Mitigation Measures" (STREAM) in Pangandaran which is intended to be a model of climate change adaptation and mitigation measures particularly in tourism destination areas in Indonesia, and Southeast Asia in general (Rosyidie, 2010). STREAM project in Pangandaran has involved transnational actors in its implementation as a pilot project of how tourism can be developed sustainably in response to its interdependence relationship with climate change. Transnational is a frequently mentioned key word in international relations (IR) today, which oftenly conflated with "international" or "supranational" to denote in a simplifying manner an organization working beyond state boundaries and acting independently from traditional state authorities. According to Risse (1995), transnational actors (TNAs) by definition, are political, social, cultural, and economic agents or groups which operate trans-societal and/or trans-governmental across borders in pursuit of their goals, to a certain degree independently from domestic governmental considerations (Thiel, 2017).

STREAM project is a model of innovation activities of adaptation and mitigation, adopts energy efficiency while strengthening local structures towards sustainable destination management. STREAM Project in Pangandaran, which is initiated by Indonesia through the Ministry of Culture and Tourism together with UNWTO as the lead agency of this project, involves transnational actors with similar interests and interconnected with sustainable tourism and climate change, collaborated, with each of their respective roles in the implementation of the project (UNWTO, Consulting Unit on Tourism and Biodiversity | STREAM, t.thn.).

The actors involved such as states, international organizations, and non-state actors (NGOs, social activists, local working groups, etc.) for example Indecon (Indonesia Ecotourism Network) as the NGO from Indonesia, adelphi as the NGO from Germany, and IESR (Institute for Essential Services Reform), with other local partners such as LWG (Local Working Group), Ilalang Group, PHRI (Hotel and Restaurant Association of Pangandaran), BBKSDA (Bureau for Conservation and Natural Resource) of West Java, and also local communities in Pangandaran. This program is also part of the ICI (International Climate Initiative), which the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMUB) supports this initiative based on the decision approved by the German Parliament. STREAM is also as a practical example of how the tourism sector can engage local communities to be part of the solutions to fight climate change (UNWTO, Consulting Unit on Tourism and Biodiversity: STREAM, 2011).

HISTORICAL BACKGROUND

Pangandaran, was hit by tsunami in 2006 which impacted the coastal area of Pangandaran, including its coral reefs and forests. The impact is also affected local income since tourism activity is one of the main sources of local communities in the area. This then has encouraged the UNWTO to implement the program of 'Tourism Development Supporting Biodiversity Conservation' in Pangandaran, Indonesia. UNWTO together with the Indonesian Ministry for Culture and Tourism has agreed to choose Pangandaran tourism area as the project site in 2007 until 2010 (UNWTO, Consulting Unit on Tourism and Biodiversity: STREAM, 2011). Seeing the result of this program, UNWTO and Indonesian Ministry for Culture and Tourism at that time, on June 13, 2011, agreed to and began planning for a long-term re-development of the tourist infrastructure in Pangandaran, as the continuation of the previous program through a STREAM project, to harmonize tourism development with the conservation of biodiversity and its ecosystem services, and to revitalize tourism destinations in Pangandaran (UNWTO, Indonesia: Tourism Development Supporting Biodiversity Conservation in Pangandaran, 2013).

Pangandaran is a popular tourism destination on the southern coast of Java, located in the Village District of Pangandaran Pananjung with a distance of approximately 92 km south of Ciamis City, Indonesia. In July 2006, Pangandaran was severely hit by tsunami caused by a 6.8 Richter earthquake, which has damaged more than 2000 houses, 5800 boats, and 41 home industries. Based on the news obtained from local media, Kompas.com, tsunami in Pangandaran has claimed 668 deaths, 65 missing (presumably dead) and 9299 wounded. In addition to casualties, the earthquake and tsunami in Pangandaran also cause damage to the facilities and infrastructure of the area, such as houses and settlements, roads, fish auctions, markets, hotels, infrastructure, education and so forth. A number of infrastructure areas that suffered considerable damage. Damage to infrastructure in the region, including in the village of Pangandaran as the core activity of tourism, damaged roads, bridges, public and social facilities, shops, buildings, and others (Indecon, 2014).

THEORITICAL FRAMEWORK

To draw up the framework of this research, there are two theoretical approaches in applying this research, which are using the Neoliberalism and Green Theory. In here, the researcher will try to analyze how both theories related and elaborate the two theories into the involvement of transnational actors in the implementation of STREAM project as the joint collaboration form of Indonesia and UNWTO with NGOs such as Indecon, adelphi, IESR, and other local partners, since Green theory rejects the perspective of Neoliberals which only focus on human-centered (anthropocentrism) while Green theory is more ecocentric.

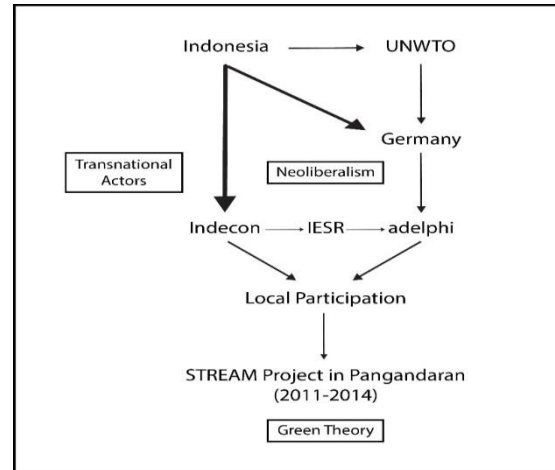


Figure 1. Research Framework

CLIMATE CHANGE AND TOURISMIN INDONESIA

There are two things that linkages climate change and tourism, which are: the impacts of climate change on tourism and the impact of tourism activities on climate change. The first relationship may demand for adaptation measures, such as goals, seasons, and shifting activities and investing in new air conditioning systems. While the second relationship may call for mitigation actions aimed at reducing greenhouse gas (GHG) emissions (Eclat, 2007). Climate change is not a remote event for tourism, but it has become a phenomenon that affects certain sectors and destinations in particular, mountainous areas and coastal areas. From the perspective of climate change impact on tourism, there are various impacts, some of which are:

- Sea-level rise - this in turn causes drowning of small islands and coastal areas. Areas that rely heavily on tourism are threatened.
- Desertification and scarcity of water producing areas are less friendly to local people and tourists.
- Deforestation and biodiversity damage - affecting ecosystems and directly reducing global carbon sinks, while also minimizing interest in visits for such purposes. The melting of snow and glaciers - melting snow and glaciers are one of the causes behind sea level rise, as well as affecting mountain and ski resorts, resulting in a shift in destination demand, tailored to the most attractive climatic conditions (UNWTO, FAQ - Climate Change and Tourism, t.thn.)

Next is how the impacts of tourism activities contribute to climate change. In order to answer that, it is exactly difficult to provide the right numbers since tourism has broad properties and various components that contribute to different levels of climate change, for example CO₂, heating, air conditioning, construction, and so on. Apart from these difficulties, it is estimated by UNWTO and UNEP (2007) that the final estimate as follows as:

- Tourism is responsible for about 5% of global CO₂ emissions. In terms of radiation imposition, tourism contributes 4.6% of global warming.
- The transport sector, including air, cars and trains, produced the largest proportion, with a total of 75% of all emissions. In terms of carbon emissions, air causes 54-75% while trainers and trains are 13%. Air travel is considered a major tourism contributor to global warming, responsible for 40% of total carbon emissions caused by this sector, and 54-75% of radiation forcing.
- The accommodation sector accounts for about 20% of emissions from tourism. It involves heating, air conditioning and maintenance of bars, restaurants, swimming

pools and so on. Obviously, this varies according to the location and size of the accommodation, as well as the type of place - the hotel has greater energy consumption than a retirement or camping place.

- Furthermore, activities like traveling to museums, amusement parks, events or shopping also contribute to a certain amount of emissions accounted for 3.5%. (UNWTO, FAQ - Climate Change and Tourism, t.thn.).

Concerning the impacts resulting from tourism change to climate change, the UNWTO then recommends several things to reduce the impact of tourism activity and growth on climate change. The UNWTO promotes high tourism potentials for GHG emissions mitigation and reduces energy consumption by the use of alternative fuels and hybrid motors. Compared to others, the accommodation sector has a highly accessible option to reduce energy, from solar and wind energy to efficient isolation methods, and develop initiatives to promote local products and avoid environmental hazards. What remains a major challenge is air transport, and because of that, UNWTO works with the International Civil Aviation Organization (ICAO), in searching for the best options for climate change activities - emissions trading, carbon offsets, incentives and taxes, etc. (UNWTO, FAQ - Climate Change and Tourism, t.thn.).

Indonesia has an active role in international negotiations on climate change and hosted the 13th Conference of the Parties to the UNFCCC in Bali which resulted in the Bali Action Plan. Indonesia as one of the countries that is most at risk to the impacts of climate change, must be at the forefront of encouraging joint efforts to combat climate change. Indonesia acknowledges that mitigation and adaptation actions must be undertaken jointly by all countries. Therefore, Indonesia is ready to cooperate both bilaterally and multilaterally with various parties (ICCSR, 2009).

Indonesia as the party of UNFCCC and the Kyoto Protocol, have been ratified through Act. No. 6/1994 and Act No. 17/2004 (Wibisana, 2013). In the year of 2009, Indonesia has become a frontrunner in the international limelight due to the country's willingness to reduce greenhouse emissions (Measey, 2010), which at that time former President of Republic of Indonesia, Yudhoyono pledged to cut Indonesia's greenhouse gas emission by 26 percent from business as usual levels by 2020, and by 41 percent with international assistance (CIFOR, 2011). The plan for emissions reduction has been stated in Presidential Regulation of 61/2011 concerning the National Action Plan on GHG Emission Reduction (NAP-GHG). The validation of the action plan in a regulatory framework has assumed it stronger ground for the implementation (Environment, 2007). One example of Indonesia's efforts to optimize emissions reduction in responding to climate change is to work with Germany towards the comprehensive partnership. Indonesia and Germany share the vision to work together in shaping the global agenda and architecture by both advancing their bilateral cooperation for mutual benefit as well as contributing positively and responsibly to global causes of common concern and interests. One of their bilateral cooperation is including in environment, climate change, forestry and renewable energy, which one of them is continuing Indonesia-Germany cooperation on sustainable use of renewable energies with a view to supporting Indonesia's aim of raising the share of renewable energies to 25% of total energy by 2025 ("Vision 25/25") (Ag-friedensforschung, 2013).

As stated by former Secretary-General of UNWTO, Francesco Frangiali, on the occasion of the UNFCCC's Bali Summit in Bali, Indonesia, 12 December 2007 that:

"Tourism contributes to global warming, and, at the same time, is a victim of climate change. A phenomenon of such magnitude could not remain without consequences for the climate on account of the greenhouse gas emissions generated by trips and stays. In turn, the warming caused by major human activities profoundly alters the conditions of tourism development. Small tropical islands and medium-altitude ski resorts are the first destinations to be affected. Others will follow, those for which the product is based on forests, glaciers, biodiversity and wildlife."(UNWTO, From Davos to Bali: A Tourism Contribution to the Challenge of Climate Change)

CLIMATE CHANGE AND TOURISM IN PANGANDARAN

Pangandaran is a coastal area and a popular beach tourism destination in West Java, Indonesia. It has been widely known both by foreign tourists and particularly by domestic tourists. Pangandaran, as one of the National Strategic Tourism Area (KSPN) according to the National Tourism Development Master Plan (RIPPARNAS), that covers administrative area of 6 districts, namely: sub Kalipucang, Pangandaran, Sidamulih, Parigi, Cijulang, and Cimerak. Pangandaran area has strong attractions and has the potential to be developed to become one of the main tourism destinations of Indonesia. Its ecosystem is dominated by sloped beaches, clear rivers, forests, villages, coconut plantations, and paddy fields. West beach which stretches along 27 km and a peninsula of 350 acres' conservation area are its main attraction. Pananjung, as the peninsula is called, divides Pangandaran beach into two parts, each at the east and west. Other attractions in Pangandaran also offer outstanding experience for tourists, such as Green Canyon, Citumang, and Batu Karas. Green Canyon is located at Kertayasa village, Kecamatan Cijulang, Kabupaten Pangandaran. It is very famous for its caves and river. During dry season, tourists can cruise the beautiful green water of Cijulang river in 30 minutes to see Green Canyon water falls. (UNWTO, Practical Guidelines for Climate Change Actions in Tourism Destinations" for STREAM Project in Pangandaran, 2014).

Flashback in 2006, when tsunami was hit Pangandaran, all tourism development in that area were collapsed. They all came down to zero, where almost all facilities and tourism supporting facilities were damaged. Tsunami had destroyed not only tourism facilities in Pangandaran and victimized more than 200.000 people, but also destroyed coral reef ecosystem. This has explained that Pangandaran have experienced an ecological crisis, which reflected towards the discussion of Green International Relations theory. As the result of the ecological crisis, the number of tourists visiting Pangandaran was fluctuating. In 2005, the total of tourists visiting Pangandaran was 423,687, and greatly decreased in 2006 due to tsunami as well as impacted the decrease in 2007. The result was also impacted on local livelihoods that are dependent on this tourism destination, as well as affected foreign exchange. (UNWTO, Sustainable Use: Tourism Development Supporting Biodiversity Conservation in Pangandaran Indonesia , 2012).

Due to the vulnerability from the impact of tsunami and climate change, and since the location plays an important role in regional development, Pangandaran has been chosen to host the implementation of STREAM project and demonstrate the opportunities offered by mitigation and adaptation measures. The initiative of STREAM project is one of the examples of how climate change integrates into the management of a destination. This project marks as sustainable tourism development in the region based on active local participation. In addition, this project also demonstrates the benefits of public-private partnerships while also acting as a 'best practice' template for grassroots adaptation and mitigation efforts. Climate change mitigation measures are the pillar of contributing to the achievement of this project. (UNWTO, UNWTO Publications: Responding to Climate Change, 2014)

The new measures that has already implemented in this project are to apply energy efficiency and renewable energy technologies; adaptation activities for coastal ecosystems such as mangrove rehabilitation and coral reef restoration. In an effort to achieve optimal results, the project involves raising awareness and capacity for communities and local stakeholders. The project is carried out by involving transnational actors towards its planning and implementation, including the state actor as well as Indonesia, International Organization which is UNWTO, and non-governmental organizations such as Indecon as the field coordinator, IESR, and Adelphi as technical support from Germany, and participation from local partners in order to make sure the sustainability, which are the hotels and Local Working Group (LWG), as well as the Destination Management Organization (DMO) committee of Indonesia. This is expected to increase community participation both in the planning and project management stages. (Indonesia S. , About | Description on Target Region. , t.thn.)

Post-tsunami recovery, the Southern coastal areas, particularly Pangandaran, continued through the support of the district, provincial and central as well as other parties such as the citizen, society and international organization which is UNWTO. The earthquake and tsunami in Pangandaran became as the momentum to be used as the demonstration model for the development of sustainable development in Indonesia. Seeing the achievement of this project, therefore, 'Sustainable Tourism through Energy Efficiency and Adaptation Mitigation Measure (STREAM) in Pangandaran' a project of joint collaboration between Indonesia under the Ministry of Tourism and Creative Economy with the UNWTO Consulting Unit on Tourism and Biodiversity have been agreed to establish in 2011 until 2014 as the continuation of the previous project in Pangandaran, a practical of sustainable tourism to address the solution in the fight against climate change (UNWTO, STREAM BROCHURE, 2011). From above data and arguments, STREAM is concluded to be established in order to prevent ecological crisis locally in responding global issues of climate change.

STREAM PROJECT IN PANGANDARAN

STREAM Project is a collaborative project that involves transnational actors in its implementation such as Indecon and IESR as the NGOs partners in Indonesia and adelphi as the technical partner in Berlin, Germany, along with local participation in Pangandaran, where the project was established on the initiation of UNWTO as the lead coordinating and implementing agency with Indonesian Ministry of Tourism and Creative Economy as the focal governmental agency in Indonesia. Transnational actors generally need national actors to collaborate with them. (UNWTO, Local Climate Change Adaptation Guide for Pangandaran. , 2014)

An important characteristic of the problem of environmental degradation is that it is a shared-problem. Therefore, environmental safeguards, including reducing greenhouse gas emissions through tourism, will not work optimally without international cooperation. Within this regard, international cooperation in this field should be directed to the optimization of its implementation, not only limited to the exchange of information and experience, due to the long-term level of greenhouse gas emission hazards. (KEMENPAR, 2011)

Although it is not easy to implement, international cooperation should be carried out especially in the following areas: reducing energy use; improving energy efficiency; increasing the use of renewable energy; and, sequestering CO₂ through carbon sinks, for example through the adaptation and mitigation activities undertaken towards STREAM Project activities in Pangandaran, as the joint collaborative project between Indonesia and UNWTO with several key partners which are Indecon, adelphi, IESR, and the participation from local partners. (KEMENPAR, 2011)

Efforts that needs to be done by Indonesia to increase the optimal benefits of international cooperation in climate change issues towards tourism can be done through several ways. First, to seek a special clause in international cooperation relating to the transfer of non-GHG emissions technologies related to the tourism sector. Thus, Indonesia can contribute to the development of technology related to tourism, which reduces greenhouse gas emissions. Secondly, seek to increase cooperation aimed at improving the quality of destinations and tourist attraction. With the increasing quality of destinations and tourist attraction in Indonesia, in addition to contributing to the reduction of greenhouse gas emissions could make tourists tend to "stay longer", and the most importantly that the condition will also further improve the welfare of local communities. (Antariksa, 2011)

The realization of this international cooperation has already been done through the joint collaboration of Indonesia and UNWTO with transnational actors involved in sustainable tourism development as the respond to climate change. In continued the achievement of previous biodiversity conservation project in Pangandaran in 2007-2010, the former Indonesian Ministry of Culture and Tourism and UNWTO Consulting Unit on Tourism and Biodiversity have collaborated to implement the project of "Sustainable Tourism through Energy Efficiency with Adaptation and Mitigation Measures in Pangandaran" (STREAM). This project is marked as the

continuation of tourism development in the region which based on active participation of local people (UNWTO, Practical Guidelines for Climate Change Actions in Tourism Destinations” for STREAM Project in Pangandaran, 2014). As part of Germany's International Climate Initiative (ICI) and supported by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety, which underpins environment issue of climate change related works worldwide in developing, recently industrializing and transition countries to contribute efficiently to adaptation to climate change and outflow decreases or emission reductions, STREAM has been building up a worldwide approach to deal with low carbon tourism in Pangandaran since it started in 2011 (UNWTO, UNWTO-led project helps fight climate change in Indonesia, 2014).

In building the local level participation, the activities on the ground including hotel establishments as well as on-site communities and local authorities such as the Local Working Group and the Pangandaran Destination Management Organization (DMO). This allowed local involvement in the planning and managing of the project. Lessons learnt was planned to be replicated and transferred to other regions in Indonesia by the Ministry of Tourism and Creative Economy (MTCE). The project is being implemented by a group of partners with UNWTO as the lead coordinating and implementing agency, the MTCE as the focal governmental agency in Indonesia, IESR and Indecon as the NGO partners in Indonesia and Adelphi as technical partner based in Berlin, Germany (UNWTO, UNWTO-led project helps fight climate change in Indonesia, 2014).

This joint collaboration project is planned essentially in order to expand the environmental change flexibility, which is the climate change of Pangandaran and the competitiveness of its tourism sector subsequently filling in as a model for other destinations in Indonesia and South-East Asia, as said by UNWTO Secretary-General, Taleb Rifai as follows:

“This project is a clear example that the tourism sector is taking its responsibility to contribute to the reduction of global greenhouse gases emission and climate change adaptation seriously”.
(UNWTO, Press Released, 2011).

The inauguration of STREAM was officially launched by former Minister of Culture and Tourism, Mr. Jero Wacik together with Mr. Taleb Rifai, UNWTO Secretary-General on 13 June, 2011, at Balairung Soesilo Soedarman, Jakarta, and attended by about 120 participants; Consisting of representatives of Ministries, West Java Provincial Government, Ciamis District Government, representatives of national and local tourism industry associations, international agencies, and community representatives of Pangandaran. The event was carried out coincides with the presence in Jakarta of the UNWTO Secretary-General to participate in the World Economic Forum on East Asia 2011(Kemenpar, Inagurasi Program UNWTO untuk Efisiensi Energi Industri Pariwisata di Pangandaran, 2011).

Here, the author found out that the cooperation towards joint collaboration project between Indonesia as a sovereign state and UNWTO as International Organization under UN bodies and the involvement of transnational actors in working together through sustainable tourism development, starting from the disaster recovery in Pangandaran in 2007-2010, until the establishment of STREAM project in 2011-2014, has been reflected in the term of Neoliberalism, as one of the theoretical framework used in this research.

Here, according to David Baldwin (1993), one of the point of neoliberal is it emphasized on maintaining international cooperation. In the cooperation, Arthur A. Stein (1982), stated that neoliberal is more concerned on the absolute gains, where actors involved in the cooperation will get equal advantage. Here, neoliberal believes that actors with common interest are trying to maximize their absolute gains through the cooperation.(Daddow, 2013)

There are several assumptions in Neoliberalism, which one of these assumptions mentioned by Rosenau:

“States are the main actors in international system but not the only actors.” (Daddow, 2013)

Neoliberalism agrees to the basic realist assumption that states are the central actors of world politics. However, the theory differs from the realist theories in several ways: (1) states are the central actors but international institutions and non-state actors are also important (2) international institutions can create cooperation among states (3) transnational relations, multinational corporations and interdependence has become important dynamics of world politics in recent decades, based on Keohane and Nye (1971). Overall, neoliberalism is a less state-centric theory vis-à-vis realist theories, and gives some role to transnational relations. The theory assigns a complementary role to transnational actors vis-à-vis states to enhance international cooperation (Erdem, 2015).

This means that states (Indonesia) are not the main actors and accept the existence of non-state actors in international system which are International Organization such as UNWTO, and assigns a complementary role to transnational actors vis-à-vis states to enhance international cooperation with NGOs such as Indecon, adelphi, IESR, and others. Another assumption stated by Keohane that neoliberalism accepted state as a sovereign state that weighing up and pursuing personal interest. (Daddow, 2013)

Sustainable tourism development program in Pangandaran tourism area received financial assistance from the Government of Germany as one of the key partners of STREAM project through UNWTO with the amount total of 1.2 million Euros or equivalent to IDR 16.9 billion. (ICI, 2013) The program runs in two phases, the first phase commenced in 2007-2010 as a post-tsunami tourism recovery program in 2006, and the second phase in 2011-2014 focusing on sustainable tourism development through the efforts of nature conservation development supporting biodiversity and energy efficiency as a contribution to climate change mitigation and emission reduction in Indonesia (Kemenpar, Inagurasi Program UNWTO untuk Efisiensi Energi Industri Pariwisata di Pangandaran, 2011). Some of the project funding has been used to set up a Mangrove Learning Centre in Pangandaran, where schoolchildren and their families can learn about mangrove ecosystems. The Centre is also proving very popular with tourists, who are keen to find out more about mangroves. ((IKI), 2011)

STREAM was being implemented by involving transnational actors or group of key partners with UNWTO as the lead coordinating and implementing agency, the Ministry of Tourism and Economy Creative as the focal governmental agency in Indonesia, Indecon and IESR as the NGO partners in Indonesia and adelphi as the technical partner based in Berlin, Germany. For the local partners, the project involves the participation of the Provincial Government of West Java, the Local Government of Ciamis Regency, and the Local Working Group in Pangandaran as well as Destination Management Organization (DMO) (Indonesia S., Tentang | Latar Belakang, 2013).

These transnational actors, including the key and local partners of the cooperation project between UNWTO and Ministry of Tourism and Economy Creative, works together hand in hand, towards the implementation of STREAM project with different tasks and roles as follows:

THE INVOLVEMENT OF TRANSNATIONAL ACTORS IN THEN IMPLEMENTATION OF STREAM PROJECT IN PANGANDARAN (2011-2014)

Adelphi, Germany

Adelphi research is a leading non-governmental organization, a think tank for policy analysis and strategy consulting based in Germany. They offer creative solutions and services on global environment and development challenges for policy, business and civil society communities. Their projects contribute to sustaining natural life systems and fostering sustainable enterprises. adelphi has extensive experience in technology transfer and international dialogue and has a proven track record as the project manager of complex international projects, several cooperation projects for the International Climate Initiative (ICI) and other donors. (STREAM, 2011)

They offer demand-driven, tailor-made services for sustainable development, helping governments, international organizations, businesses and nonprofits design strategies for addressing global challenges. With more than 180 staffs, they provide high-quality interdisciplinary research, strategic policy analysis and advice, and corporate consulting. They facilitate policy dialogue and provide training for public institutions and businesses worldwide, helping to build capacity for transformative change. Since 2001 adelphi have successfully completed over 800 projects worldwide. Their work covers the following key areas: Climate, Energy, Resources, Green Economy, Sustainable Business, Green Finance, Peace and Security, International Cooperation and Urban Transformation. (adelphi, 2017)

In here, adelphi acting as an international expert in energy, climate and STREAM development projects in Pangandaran. Adelphi's experts provided support during the STREAM project, mainly through capacity development the facilitation of adaptive and climate protection measures and also remained on hand as technical consultants to answer questions on energy efficiency and renewable energy. In addition, a new method of analysis, based on a comprehensive collection of data, was implemented to assess the tourist sector's emission sources, the results of which have formed the basis of specially developed software. This software will, from then on, be utilized in training sessions, and will give decision makers a better understanding of an area's emissions profile, as well as to enable the facilitation of realistic emission reduction goals (STREAM, 2011).

Adelphi was contracted by the UNWTO designed and conceptualized a training of trainers which energy and climate management system for hotels and a "Low Carbon Planning" software for tourism planners, which took place from March 12-14, 2012 in Bandung/West Java. During the two-day-training, hotel owners and managers as well as regional and tourism planners and representatives of both, the Ministry of Tourism and Creative Economy and the Ministry of Energy learned about the new tools that will be Pangandaran's contribution to international climate change mitigation. On the first day participants were introduced to the "Energy and Climate Management System (ECMS)", how to implement and to maintain it (adelphi, Software and management system for climate-friendly tourism introduced in Indonesia, 2012).

The second day saw the presentation of "Low Carbon Planning (LoCaP)", a newly developed software that allows local and regional tourism planners to judge the impact of various measures on the greenhouse gas emission profile of an observed region. The event further built on a previous training held in Bandung last March to further deepen the understanding for greenhouse gas emission reduction in tourism. After a short theory session, the participants actively applied the software tool through exercises in order to gain a better understanding of emissions reduction goals and ways to achieve them (adelphi, Training on climate-friendly tourism in Indonesia. , 2012).

Indonesia Ecotourism Network (Indecon)

Indecon is a non-governmental organization engaged in the development and promotion of ecotourism in Indonesia. Indecon is actively involved in ecotourism development by conducting research in the field of ecotourism. The research focuses on topics related to eco-tourism development and sustainable tourism comprising tourism assessments; Tourism planning, market analysis; Business analysis, tourism organization development, and tourism impact studies. (Indecon, Researches, 2017) Indecon works with various stakeholders in developing ecotourism or sustainable tourism destinations, as well as tourism-based communities. Partners are internationally diverse organizations, including International Donor Institutions (UNWTO, European Union, IUCN, UNESCO), Ministry of Tourism and Creative Economy, NGOs (WWF, TNC, CI) and Local Governments.

Indecon has been working with UNWTO in Pangandaran since 2007. UNWTO has joined forces with the Government of Germany to provide a range of consultancy and advisory support in the field of biodiversity and tourism development following the Guidelines on Biodiversity and Tourism Development of the Convention on Biological Diversity (CBD). Indecon participates in

the efforts to develop green tourism through the STREAM project in Pangandaran as a technical partner and also appointed by the Ministry of Tourism and Creative Economy as the National Coordinator. Towards this project, there are two core focuses that are adaptation and mitigation. Indecon participates in adaptation, where this project is in line with Indecon's vision and mission in terms of ecotourism which the goal is directly fitted the sustainable tourism (INDECON, 2012). Regularly Indecon undertakes capacity building activities of stakeholders through engagement in trainings conducted by governments, international agencies, or NGOs. In this case Indecon acts as resource person or designs the contents of the training, with themes consisting of ecotourism guide, ecotourism product development, ecotourism planning or sustainable tourism, or ecotourism management (Indecon, Tourism Development Supporting Biodiversity in Pangandaran, Indonesia; supported by UN World Tourism Organization (UNWTO), 2014).

Institute for Essential Services Reform (IESR)

The IESR (Institute for Essential Services Reform) is a think tank, actively advocating and campaigning to ensure the fulfillment of community energy needs, justice in the utilization of natural resources and ecological sustainability. The IESR was established in 2007 as a continuation of the Working Group on Power Sector Restructuring, a working group that advocates for electricity policy in Indonesia during 2001-2006. After the WGPSR mandate ended in 2006, based on recommendations from external evaluations conducted by South Research (Belgium) and WGPSR member agreements consisting of INFID, ICW, YLKI, PIRAC, LBH Jakarta, DebtWatch and Yayasan Gemi Nastiti (Geni) a more permanent institution with a broader focus on issues than the electricity sector, but the energy sector in Indonesia (IESR, 2012).

In 2007, the IESR stood in the form of Associations and its members were individuals from representatives of previous WGPSR members. The idiom "Essential Services" in the name of IESR refers to "energy and water services" which we think is an essential requirement of everyone who cannot be ignored and be part of the economic and social (ecosoc) rights of modern humans. In the next program development, IESR now focuses on four issues: energy, electricity, climate change, and extractive industries. For the period 2008 - 2013, IESR works on 4 strategic programs: (1) Access to Energy; (2) Electricity Governance; (3) Climate Justice; and (4) Extractive Industry Reform. (IESR, 2012)

IESR is positioning itself as a leading think tank for civil society groups. To support the achievement of the stated objectives, the IESR conducts public policy analysis and research as well as advocacy of policy, as well as campaigns on specific issues. In addition, IESR also carries out capacity building and provides technical support for organizations or civil society groups to help them achieve their advocacy goals (IESR, STREAM: Pelatihan Efisiensi Energi, 2017).

In this project, IESR assumes responsibility for implementing mitigation activities. The IESR has conducted energy audits at hotels and restaurants on November 2012 in Pangandaran and Batu Karas, to measure potential energy savings and possible actions, and identify energy conservation actions. The IESR works closely with the hotel management, improving their capacity on the energy management and climate change side, raising their awareness, as well as enhancing the capacity of local governments, the Hotel and Restaurant Association in Indonesia, as well as local groups on energy efficiency and mitigation climate change. The project also involves local and district governments to develop low-carbon development planning. (IESR, STREAM: Pelatihan Efisiensi Energi, 2017)

The IESR is also responsible for identifying renewable energy potentials in the Pangandaran region as well as the implementation of energy sustainability technologies. The IESR does so by means of field surveys to see the potential of renewable energy and options for the adoption of renewable energy technologies at the community level. (IESR, STREAM: Pelatihan Efisiensi Energi, 2017)

STREAM Local Partners

The STREAM project involves the participation of the Provincial Government of West Java, the Local Government of Ciamis Regency, and the Local Working Group in Pangandaran as well as Destination Management Organization (DMO). To ensure the sustainability of the efforts initiated in STREAM, both for the mitigation and adaptation pilot measures, STREAM built the capacity and engaged the following local partners or stakeholders: (STREAM, 2011)

- A. LWG (Local Working Group): LWG established since the previous Indonesian project, local focal points to represent the society towards sustainable tourism development. It is “Volunteers” that carry out the monitoring and engagement of projects once it is over.
- B. PHRI (Hotel and Restaurant Association Pangandaran) is an umbrella body that is dedicated and supported in bringing together members of hotels and restaurant to participate in STREAM
- C. Ilalang Group is a local environmental group that is managing and operating the mangrove planting program, as well as handling the mangrove tours.
- D. Babakan village government is village government that handed STREAM over the mangrove program as owner, signed MoU for the 17 ha green belt where the mangroves are planted, established an institutional council to oversee the mangrove program and appointed Ilalang Group as the organization to operate the mangrove program.
- E. Bureau for Conservation and Natural Resource of West Java (BBKSDA), a governmental agency that is sustaining the efforts of the coral rehabilitation and planting program of STREAM.
- F. Technical Unit of Education Office Pangandaran Regency, is the focal point of the Ministry of Education to collaborate on the Mangrove Planting Program among schools in Pangandaran, assimilating the mangrove program as part of the curricular activities, and integrating environmental studies among schools (UNWTO, Practical Guidelines for Climate Change Actions in Tourism Destinations” for STREAM Project in Pangandaran, 2014).

DISCUSSION

Overall, STREAM project has already implemented the principles of sustainable tourism, including the environmental sustainability, socio-cultural sustainability, and economic sustainability, which is also directly in line with the four pillars of Indonesia's tourism development policy, including pro-poor, pro-growth, pro-job, and pro-environment. STREAM has implements how sustainable tourism can be as a tool in addressing the issue of climate change towards energy efficiency, adaptation and mitigation measures.

In the opening of STREAM Delivery Conference in Jakarta, on May, 2014, UNWTO Executive Director for Operational Programme and Institutional Relations, Márcio Favilla has said:

“For tourism, climate change is not a remote event, but a phenomenon that already affects the sector. Seeing the results achieved by STREAM, it stands clear that this project is an exceptional example of how tourism can be an effective tool in the fight against climate change, protecting natural resources while leading to inclusive development of local communities and fruitful cross-sector cooperation.” (UNWTO, Press Released, 2011).

Not only as an example of how tourism can be an effective tool in the fight against climate change and protecting natural resources to an inclusive development of local communities, but also STREAM Project has created fruitful cross-sector cooperation towards the involvement of transnational actors in its implementation.

To relate with what have been mentioned before in chapter 3 that this cooperation of joint collaboration project between Indonesia and UNWTO with the involvement of transnational actors is applied in Neoliberalism discussion which Neoliberalism agrees: (1) states are the central actors

but international institutions and non-state actors are also important (2) international institutions can create cooperation among states (3) transnational relations, multinational corporations and interdependence has become important dynamics of world politics in recent decades, based on Keohane and Nye in 1971 (Erdem, 2015). Overall, neoliberalism is a less state-centric theory vis-à-vis realist theories, and gives some role to transnational relations. The theory assigns a complementary role to transnational actors vis-à-vis states to enhance international cooperation.

This explanation has been applied on how transnational actors such as Indecon which have been selected by Indonesia under Ministry of Tourism and Creative Economy given its role as the national coordinator, as well as IESR as local NGO technical partner, and adelphy as NGO from Germany, with local partners' participation involves which have significant roles and influence in supporting and maintaining the goals of STREAM Project implementation in Pangandaran.

Between Indonesia and UNWTO joint collaboration as the initiative actors and lead coordinating project also has resulted in the absolute gains where actors involved in the cooperation will get equal advantage based on what Arthur A. Stein in 1982 (Daddow, 2013). The absolute gains can be seen from the result of the implementation towards Indonesia and UNWTO side, as what have been mentioned before that Indonesia is committed to reduce GHG emissions by 26% by 2020, detailed in Indonesia Climate Change Sectoral Roadmap (ICCSR) that setting the national goals, sectoral targets, milestones and priorities for actions with regards to adaptation and mitigation of climate change, while STREAM project supports this, and proving that tourism sector is a sector that can be used as a tool in reducing its energy footprint and adapting to climate change. (Nirwandar, Climate Change and Tourism in Indonesia, 2013)

STREAM as the implementation of joint collaboration project between Indonesia under the Ministry of Tourism and Creative Economy and UNWTO that valued the principles of sustainable tourism as well as contributing to reducing GHG emission in response to climate change, has practically reflected towards the discussion sphere of Green Theory.

Beside Neoliberalism approach, the researcher also found out that the topic is also referring to the Green theory approach as described earlier in the previous chapter. The activities and implementations applied in the STREAM project, in the context of ecotourism, have described the objectives and achievements of Green theory as it holds ecocentric philosophy, ecological citizenship, limits to growth, with modified slogans of *'act locally, think globally'* (Paterson, 2013). This is reinforced by STREAM project activities that interact directly in environmental justice, adopt ecological footprints, prosper the local community, and as an action in warding off climate change towards local environment by energy efficiency in the tourism hospitalities, adaptation and mitigation measures activity in the area.

Paterson have identified the debate within the Green between two strands of thought on how best generate environmental justice. The first strand is what could be seen as the more conservative:

"...maintain states in their present form but reform their role to give more say over environmental issues for regional and international organizations, which in this approach, the state retains its central role in IR but its role is modified to help humans act locally, think globally" (Daddow, 2013).

Constructed with the statement above, Indonesia still retains its central role in International Relations, but modified by the environmental issues concerned by UNWTO, to act locally in Pangandaran as the site of pilot project by developing sustainable tourism activities, in order to respond global issues of the interdependence between tourism and climate change.

There is an expansion in form of governance that cross scales from global to local in all sorts of different ways. For examples, governance initiatives on climate change, such as the carbon disclosure project, the transition towns movement, the renewable energy and energy efficiency

partnership or the climate change and biodiversity alliance. These are organized by various actors – city or regional governments, companies, institutional investors, environmental or development NGOs, often working in novel collaborative arrangements, but what they have in common is an attempt to work transnationally because the globe at the sites where they think interventions are needed, not according to the logic of states sovereignty, and at times precisely to fill the gap left by the inadequacy of state-led response to climate change.(Daddow, 2013).Thus, not only discuss about ecocentrism and ecological crisis, green theory also has reflected towards the involvement of transnational actors in the implementation of STREAM Project in Pangandaran because of the role of transnational actors in resolving the current environment issues.

As what have been explained in previous chapter, both Neoliberalism and Green theory have some flaws assumptions that are interrelated and criticized. This can be seen from what has been viewed by Paterson in 1990 that for the purposes of Green theory he developed, it flaws on the two mainstreams theory, which are Neorealism and Neoliberalism.

What means by Green theorists about their critics towards Neoliberal, is that neoliberal interaction of economics and politics become as the cause of environmental catastrophe because of their anthropocentrism.(Paterson, 2013)Neoliberals might be human-centered, but on the other hand, mostly to linked with the implementation of STREAM project in Pangandaran, the Neoliberalism have embraced the idea of environment conservation as what Green theory see.

Trainer (1985) mentions along with the Green theory emphasize that because the environmental crisis is a shared problem, for example climate change, therefore the solution design should also be a joint responsibility. It is necessary for countries to undertake collaborative research, build trust and work on shared environmental goals to conserve depleted resources and also keep their technological advancements in turn. (Essays, 2015) According to Paterson, this issue can be viewed from Neoliberal perspective towards Green theory which more closely associated with Robert Keohane (1989), as he said that neoliberals suggest that the possibilities of cooperation are significantly greater and international organizations and institutions may therefore play significant role in fostering cooperation towards environment issue.(Paterson, 2013)

Constructed with the explanation above, the researcher found out that even though Green theory rejects Neoliberal's anthropocentrism, Neoliberal could also balancing the between human and non-human (ecology) which proves that there's a possible cooperation on the issue of global environment instead of the greediness of political and economic power(Paterson, 2013). This have been proved by the case of Indonesia and UNWTO cooperation towards the implementation of STREAM project in Pangandaran, that valued the ecology conservation, sustainable development, and environmental balanced between human and ecological, that acted locally (in Pangandaran) to think globally towards the issue of global climate change. Overall, this has explained that Neoliberal is not always in line with the Green theory view that Neoliberal activity cannot efficiently cooperate in solving environmental issues. Moreover, Brian J. Gareau (2011) has stated that neoliberalism developed the idea of a convergence of the liberal desire to expand and intensify market forces and environmentally sustainable development.

CONCLUSION

The STREAM project in Pangandaran was established by Indonesia under the Ministry of Tourism and Creative Economy with UNWTO on June 11, 2011 as the joint collaboration project with the involvement of transnational actors towards its implementation from 2011-2014. The transnational actors are including Indecon and IESR as the NGOs from Indonesia and adelphy as NGO and technical partner from Germany as the key partners of this project and local partners' participation such as the Local Working Group, Ilalang Group, Babakan Village Government, PHRI, BBKSDA of West Java, local communities and tourists. The implementation of STREAM project is formed in sustainable tourism development which has been implemented in accordance with the climate change mitigation and adaptation measures.

In the implementation of STREAM Project, each of transnational actors involves have significant task and roles in supporting its implementation, which is Indecon as a technical partner and also appointed by the Ministry of Tourism and Creative Economy as the National Coordinator, focusing in adaptation measure. IESR assumes responsibility for implementing mitigation activities, while adelphi acting as an international expert in energy, climate and STREAM development projects in Pangandaran. Adelphi's experts provided support during the STREAM project, mainly through capacity development the facilitation of adaptive and climate protection measures and also remained on hand as technical consultants to answer questions on energy efficiency and renewable energy. While the local partners and communities have big roles in keeping and maintaining the sustainability in the area.

STREAM project programs in Pangandaran that have been implemented are climate change adaptation and mitigation activities, such as mangrove planting and breeding in Bulaksetra, as the Green Belt area in Pangandaran, as well as coral reef rehabilitation, mitigation program in the form of energy efficiency in tourism facilities in Pangandaran, making innovation of renewable energy that is cost effective and environmentally friendly, held training of trainers conducted to build the capacity of local residents in the implementation of the STREAM project, building awareness of citizens with the interests of environmental protection to mitigate the use of GHG emission, promoting education towards children and women empowerment towards mangrove cultivation.

Indonesia and UNWTO are both concerned about the importance of sustainable tourism as well as the interdependence between tourism and climate change. STREAM project has already implemented the principles of sustainable tourism, including the environmental sustainability, socio-cultural sustainability, and economic sustainability, which is also directly in line with the four pillars of Indonesia's tourism development policy, including pro-poor, pro-growth, pro-job, and pro-environment. STREAM has also implements how sustainable tourism can be as a tool in addressing the issue of climate change towards energy efficiency, adaptation and mitigation measures. This project has been reported and published as the guidelines for implementing sustainable tourism with energy efficiency through adaptation and mitigation measures to be replicated in other destinations in Indonesia by DMO (Destination Management Organization) and as the guidelines for other destinations in South-East Asia and beyond through UNWTO publications and reports of STREAM Project. (Gareau, 2011)

The involvement of transnational actors and the implementation of STREAM project as the joint collaboration project between Indonesia and UNWTO have been analyzed in International Relations scope through the Neoliberalism and Green theory approach. The absolute gains can be seen from the result of the implementation towards Indonesia and UNWTO side, as what have been mentioned before that Indonesia is committed to reduce GHG emissions by 26% by 2020, which is detailed in Indonesia Climate Change Sectoral Roadmap (ICCSR) that setting the national goals, sectoral targets, milestones and priorities for actions with regards to adaptation and mitigation of climate change, while STREAM project supports this, and proving that tourism sector is a sector that can be used as a tool in reducing its energy footprint and adapting to climate change. Besides, STREAM also contributes to the Davos Process initiated by UNWTO. While for the involvement of transnational actors has created a fruitful cross-sector cooperation, which has supporting the project achieving the goals, increasing the research and development in sustainable development, climate change, and renewable energy, also in expand the networking and experience towards the transnational actors involved. STREAM was established in order to prevent the ecological crisis experienced by Pangandaran, where ecological crisis in International Relations is being applied in the discussion of Green Theory. Not only that, as what have been mentioned by Eckersley, that transnational actors have emergence role towards the global environment governance.

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