

**IN SEARCH OF “PEMBANGUNAN
BERKELANJUTAN” (A CASE STUDY OF
ENVIRONMENTAL ISSUES AND JAPAN
FOREIGN DIRECT INVESTMENT IN
INDONESIA IN 1980-2010)**

**Pembangunan Berkelanjutan is Indonesian words for
sustainable development*

AGENDA

- Mauna Loa Report vs Percentage of Pollutants in Each Country
- Environmental Policy in Japan and Indonesia
- Vertical FDI Level in Indonesia
- Conclusion



MAUNA LOA REPORT VS PERCENTAGE OF POLLUTANTS IN EACH COUNTRY

- Data sets from :
 - a. Mauna Loa
 - b. US-EPA
 - c. NBCC Republic of Indonesia
 - d. Ministry of Environment Government of Japan



MAUNA LOA REPORT VS PERCENTAGE OF POLLUTANTS IN EACH COUNTRY

Year		Average Green House Gases	Interpolated Green House Gases	Indonesian Average Green House Gases	Percentage of Indonesia GHG in the world	Percentage of Japan GHG in the world
1980	338,68	338,68	36,11	23,71	11%	7%
1990	354,35	354,35	35,50	20,98	10%	6%
2000	369,52	369,53	33,72	18,48	9%	5%
2010	389,85	389,84	27,89	15,59	7%	4%

1. Numbers are in parts per million (ppm)

2. Data source obtained from Mauna Loa report for Average GHG and Interpolated GHG

3. Data Source for Indonesia and Japan is average comparison data from US-EPA, NBCC, and MOE. Extra measurement was include by obtaining data from world bank and UN Statistical Divisions.



MAUNA LOA REPORT VS PERCENTAGE OF POLLUTANTS IN EACH COUNTRY

- The trends of GHG both in Japan and Indonesia are decreasing although there is a percentage shares that increasing but still in overall it was decreasing
- Starting from 1980, the positions of Japan in terms of percentage is already lower than Indonesia, conclusion that I can make is geographically Japan landscape is smaller than Indonesia, and this had a significant impact to GHG emission since the larger the area, established industry will be larger.
- Second arguments are, it was related to populations. IPCC always stated a relations between human activities and their contribution to the global warming. Indonesia populations was larger than Japan, means that human activities are bigger than Japan. This was related to consumption of energy that produce GHG.
- IPCC report in 2008, clearly stated that 60% of global warming that happen in the world was contributed by human activities. This make an assumption that population issues is a crucial issues to climate change and global warming issues.



ENVIRONMENTAL POLICIES (JAPAN)

- Basic Environmental Law (Law no.91 year 1993, ratified on November 13, 1993 and amended in 1997 by Law no.81 of 1997)
- Law concerning the promotion of procurement of eco friendly goods and services by the state and other entities (Law on Promoting Green Purchasing) (Law no 100 of 2000)
- Law concerning the promotion of business activities with environmental consideration by specified corporations, etc., by facilitating access to environmental information, and other measures (Law no.77 of 2004)



ENVIRONMENTAL POLICIES (INDONESIA)

- Basic Establishment Law of Ministry of Environment Republic of Indonesia (Law No.4 Year 1982)
- Law about the usage of natural resources (Law no.5 Year 1990)
- Law about the legalization and adaptation of Stockholm Convention on persistent organic pollutants (Law number 19 year 2009)



ENVIRONMENTAL POLICIES (CONCLUSION)

- Conclusion that I can take from amendments point of view are, the problems are in the matters of applying the new law to public.
- Applied a new law need a lot of compensation from the government in terms of cost, this is (so far) why in the case of Indonesia it is not in line with the pollutant levels.
- There are no significant correlations of establishment or amendments of new environmental policies because the trends of pollutant level is decreasing this because the indicator of pollutants is getting bigger therefore percentage from countries are look smaller and going into a positive way. But overall there are no strong and clear relations between this two.



VERTICAL FDI

No	Year	Percentage of FDI to GDP
1	1980	0,13
2	1990	0,96
3	2000	-2,76
4	2010	1,94



VERTICAL FDI

- We can see that the percentage of FDI in Indonesia are very small in comparison with GDP make it not reliable at all if we linked all of this into the effect of environmental policies that pushed towards Japanese government policies that performed FDI in Indonesia. Even though the level of vertical FDI from Japan is the highest in Indonesia, it doesn't make sense how it can affected a pollutant level if percentage of FDI is only around 1% ?. Start from this I can say that there are no strong relations between FDI level and pollutant level in Indonesia.



RESULT AND CONCLUSION

- Both EKC and PHH are talking about Pollutant level will going hand in hand with GDP, so when GDP is increasing automatically pollutant level will be increasing too, PHH as the extension of EKC said that there was another factor that should be included to see the relations between economy (GDP) with pollutant level which is export and import. Based on this two arguments I performed a research that challenge this arguments.



RESULT AND CONCLUSION

- Result from the first phase we can see that it is not true that pollutant level is increasing soon after GDP is increase. Both data of Indonesia and Japan shows that there is a positive trends of pollutant level. This result appear because there are 1 factors that EKC and PHH forgot to put on as a factor, population growth. Indeed the level of pollutant in the world as in total average is increase but this cannot just be blame to Indonesia and Japan. It is really possible to said that the trends in these two countries are declining but in other countries is increasing, therefore there is “filling the box” assumptions about this. One country loss but one country gain.



RESULT AND CONCLUSION

- Result from the second phase we can see that establishment of environmental policies in Japan does not promote any Vertical Foreign Direct Investment performed by Japanese Company. There is no clear relations we can see between these two. Things that enhance Japan in decreasing the pollutant level are the system that running by Japanese Government and in fact the percentage are pretty much stagnant in Japan, this mainly because there are only small chance to do vertical investment in Japan since limitation of the area and expensive cost of establishment (this including tax as well). In other hand in case of Indonesia, they actually established a strict rule as well in terms of environmental policies the problems are in the matters of applying the new law to public. Applied a new law need a lot of compensation from the government in terms of cost.



RESULT AND CONCLUSION

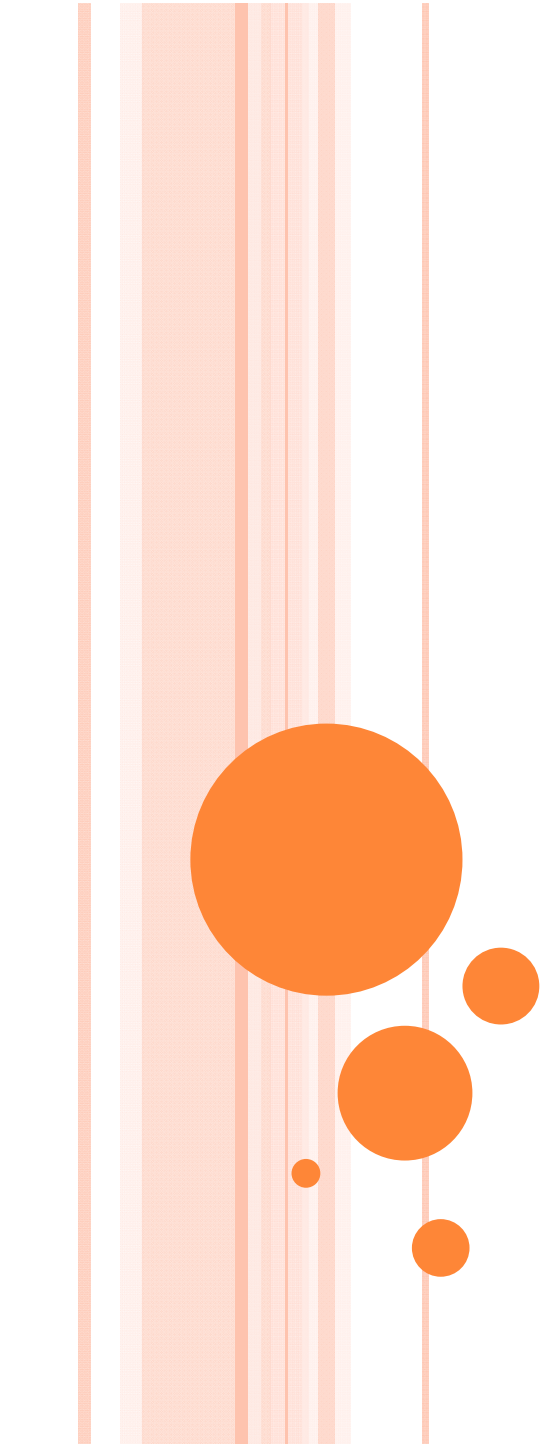
- Result from the third phase are there phase are there are no strong relations (perhaps I can say very weak relations) between vertical FDI performed by Japanese government to pollutant level in Indonesia. This because the percentage of FDI is only around 1% to the GDP and infact the trends of pollutant level is going to a positive way.
- Globalization that brought up modernization and new factors to be notice make EKC and PHH a little unrealistic nowadays. This might work if we calculate it as in Global number instead only a relations between 2 countries. Facotrs such as population growth, advance technology, and application to public are the key factors that could keep country tracking down their performance along with pollutant level.



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**“CONTROLLING CARBON IS A
BUREAUCRAT’S DREAM. IF YOU
CONTROL CARBON, YOU CONTROL
LIFE.” (DR. RICHARD LINDZEN,
1992)**