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LAPORAN KEMAJUAN PENELITIAN

Informasi Data Usulan Penelitian

1. IDENTITAS PENELITIAN

A. JUDUL PENELITIAN

Investigasi Pengaruh Produksi Listrik terhadap Kualitas Lingkungan dan Pertumbuhan Ekonomi di Indonesia

B. SKEMA, BIDANG, TEMA, DAN TOPIK PENELITIAN

Skema Penelitian	Bidang Fokus Penelitian	Tema Penelitian	Topik Penelitian
Penelitian Dasar	Energi - Energi Baru dan Terbarukan	Teknologi konservasi energi	Teknologi hybrid dalam pemanfaatan sumber energi terbarukan.

C. KOLABORASI DAN RUMPUN ILMU PENELITIAN

Jenis Kolaborasi Penelitian	Rumpun Ilmu 1	Rumpun Ilmu 2	Rumpun Ilmu 3
Kolaboratif Luar Negri	ILMU EKONOMI	ILMU EKONOMI	Ekonomi Pembangunan

D. WAKTU PELAKSANAAN

Tahun Usulan	**Tahun Pelaksanaan**	**Lama Penelitian**
2022	2023	1

E. ANCOR RESEARCH

Anchor Research	**Topik Anchor**
Imamudin Yuliadi, Prof. Dr., S.E., M.Si.	Economic Development & Monetary Policy

2. IDENTITAS PENELITIAN

Nama	Peran	Tugas
Dyah Titis Kusuma Wardani, S.E., MIDEC., Ph.D.	Ketua Pengusul	
Romi Bhakti Hartarto, S.E.,M.Ec., Ph.D.	Anggota Pengusul	Menyusun manuskrip publikasi

Nama	Peran	Tugas
Gigih Ganang Asyraf R.	Mahasiswa Bimbingan	Citing & referencing

3. MITRA KERJASAMA PENELITIAN (JIKA ADA)

Pelaksanaan penelitian dapat melibatkan mitra kerjasama, yaitu mitra kerjasama dalam melaksanakan penelitian, mitra sebagai calon pengguna hasil penelitian, atau mitra investor

Mitra	Nama Mitra	Kepakaran

4. KOLABORASI PENELITIAN (JIKA ADA)

Mitra	NIDN/NIK	Instansi
Mohammed Shameem P	N/A	University of Hyderabad

5. LUARAN DAN TARGET CAPAIAN

Luaran Wajib

Tahun	Jenis Luaran
1	Publikasi Jurnal Internasional terindeks SCOPUS,

Luaran Tambahan

Tahun	Jenis Luaran
1	Naskah Akademik

6. KLUSTER

Kluster	Sub Kluster	Group Riset	Mata kuliah
			--

7. ANGGARAN

Rencana anggaran biaya penelitian mengacu pada PMK yang berlaku dengan besaran minimum dan maksimum sebagaimana diatur pada buku Panduan Penelitian dan Pengabdian kepada Masyarakat.

Total Keseluruhan RAB Rp. 18,000,000

Tahun 1 Total Rp. 18,000,000

Jenis Pembelanjaan	Komponen	Item	Satuan	Vol.	Harga Satuan	Total
PELAPORAN, LUARAN WAJIB, DAN LUARAN TAMBAHAN	Biaya Seminar Nasional	acara	Paket	2000000	Rp. 1	Rp. 2,000,000

Jenis Pembelanjaan	Komponen	Item	Satuan	Vol.	Harga Satuan	Total
PELAPORAN, LUARAN WAJIB, DAN LUARAN TAMBAHAN	Biaya Seminar Internasional	acara	Paket	5000000	Rp. 1	Rp. 5,000,000
PENGUMPULAN DATA	Biaya Konsumsi Harian	hari	OH	100000	Rp. 5	Rp. 500,000
PENGUMPULAN DATA	Transportasi/BBM	hari	OK(Kali)	100000	Rp. 5	Rp. 500,000
ANALISIS DATA	Honorarium Pengolah Data	bulan	Per Penelitian	2	Rp. 2,000,000	Rp. 4,000,000
ANALISIS DATA	Honorarium Analisis Data	orang	OK(Kali)	2	Rp. 2,500,000	Rp. 5,000,000
PENGUMPULAN DATA	Honorarium Asisten Lapangan	orang	OJ	2	Rp. 250,000	Rp. 500,000
PENGUMPULAN DATA	Uang Harian	hari	OH	5	Rp. 100,000	Rp. 500,000

8. LEMBAR PENGESAHAN

HALAMAN PENGESAHAN
LAPORAN KEMAJUAN PENELITIAN SKEMA:

Judul	: Investigasi Pengaruh Produksi Listrik terhadap Kualitas Lingkungan dan Pertumbuhan Ekonomi di Indonesia
Peneliti/Pelaksana	: Dyah Titis Kusuma Wardani, S.E., MIDEC., Ph.D.
NIDN	: 0529088304
Jabatan Fungsional	: Asisten Ahli
Program Studi/Fakultas	: Ekonomi
Nomor HP	: 08112638191
Alamat surel (e-mail)	: dyah.wardani@umy.ac.id

Anggota

Nama	: Romi Bhakti Hartarto, S.E.,M.Ec., Ph.D.
NIDN	: 0510099201
Jabatan Fungsional	: Asisten Ahli
Program Studi/Fakultas	: Ekonomi

Nama	: Gigih Ganang Asyraf R.
NIM	: 20180430160
Prodi	: S1 Ekonomi

Nama	: Mohammed Shameem P
NIK	: N/A
Institusi	: University of Hyderabad

Biaya : Rp. 18,000,000

Yogyakarta, 07 Mei 2023
Mengetahui,
Kepala LRI,

Prof.Dr. Dyah Mutiarin, MS.i.
NIK : 19700502 199603

9. RINGKASAN

Economic growth is essential for a country to maintain social welfare for all levels of society. Thus, massive electricity production is required to achieve the desired economic growth. The tradeoff between different sources of power generation, economic growth, and environmental quality cannot be denied in the literature. Thus, to reduce carbon emissions and sustain decent economic growth, there is a need to reduce electricity production based on fossil fuels, namely coal, oil, and natural gas. In addition, to increase total electricity production, it is necessary to increase the use of renewable sources of electricity generation, such as hydro. This study identifies the various sources of electricity generation used and assesses how these relate to economic growth and environmental quality in six selected ASEAN countries (Indonesia, Malaysia, Filipina, Thailand, Vietnam, and Myanmar) from 1994 to 2014.

10. KEYWORDS

Electricity production, economic growth, environment, ASEAN

11. HASIL PELAKSANAAN PENELITIAN

The findings of this research can be concluded in the two following remarks. First, model one reveals that economic growth in six selected ASEAN countries is enhanced by electricity generation from all sources, while the contribution of electricity production from hydroelectricity remains the largest and strongest. Second, model two suggests a little environmental impact of electricity production from hydroelectric, whereas fossil fuel-based electricity production emits carbon dioxide with coal sources being the largest contributor. Based on the results, this study promotes several policy recommendations. First, these six ASEAN countries should invest more in hydropower projects, such as through the effective use of unused water resources. Second, there is a need to reduce the coal mix in power generation since it is a dirty fuel, for example, through subsidies and tax incentives for other fuels like hydroelectric. Besides, clean coal technology in these countries needs to be promoted to improve economic efficiency and environmental sustainability. Finally, to have higher economic growth and better environmental quality, implementing the above measures could help these countries achieve sustainable development goals.

12. STATUS LUARAN

On-going penyelesaian naskah publikasi jurnal.

13. PERAN MITRA

Mitra menulis bagian introduction dan data & methods untuk publikasi jurnal.

14. KENDALA PELAKSANAAN PENELITIAN

Perbedaan jadwal luang dengan mitra. Mitra baru bisa mengerjakan bagiannya per bulan ini hingga akhir bulan Juni.

15. RENCANA TAHAPAN SELANJUTNYA

Submit ke International Journal of Energy Sector Management (Scopus Q2 terbitan Emerald) pada awal Juli 2023 setelah mitra selesai menyelesaikan bagiannya.

16. DAFTAR PUSTAKA

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17. LAMPIRAN-LAMPIRAN

Panel Data Estimation

	Model 1 Dependent variable: GDP			Model 2 Dependent variable: CO_2		
Regressors	Common Effect	Fixed Effect	Random Effect	Common Effect	Fixed Effect	Random Effect
Coal	0.055 (0.074)	0.379** (0.168)	0.215* (0.118)	0.056 (0.096)	0.703*** (0.139)	0.638** (0.127)
Hydro	0.127** (0.060)	0.386** (0.173)	0.238** (0.104)	-0.301*** (0.078)	0.261* (0.142)	0.188 (0.126)
Gas	0.054 (0.057)	0.355** (0.170)	0.190* (0.105)	0.032 (0.073)	0.494*** (0.140)	0.427*** (0.124)
Oil	0.043 (0.077)	0.365** (0.174)	0.197* (0.119)	-0.234** (0.100)	0.347** (0.144)	0.281** (0.130)
Constant	-0.827 (5.934)	-29.24* (16.06)	-13.91 (10.24)	45.29*** (7.69)	-6.29 (13.27)	0.167 (11.97)
Hausman chi2 Prob>chi2		3.00 0.559			8.72 0.069	

Source: Authors' calculations