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HASIL PENILAIAN SEJAWAT SEBIDANG ATAU PEER REVIEW
KARYA ILMIAH : JURNAL ILMIAH

Judul karya ilmiah (artikel) : Micro-Grid Oil Palm Plantation Waste Gasification Power Plant in Indonesia: Techno-Economic and Socio-Environmental Analysis (**Jaka Isgiyarta**,; Sudarmanta, B.; Prakoso, J.A.; Jannah, E.N.; Saleh,A.R)

Jumlah Penulis : 5 orang

Status Pengusul : Penulis Pertama

Nama Penulis : **Dr. Jaka Isgiyarta, M.Si, Akt**

Identitas : a. Nama Jurnal : Energies

Jurnal Ilmiah : b. Nomor ISSN : online ISSN 19961073

: c. Volume, nomor, bulan, tahun : volume 15, issue 5, 1782

: d. Penerbit : Multidisciplinary Digital Publishing Institute (MDPI)

: e. DOI artikel (jika ada) : <https://doi.org/10.3390/en15051782>

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: g. Terindeks di scimagojr / Thomson Reufer ISI knowledge atau di nasional / terindeks di DOAJ, CABI, Copernicus : Q1,SJR 2021 0,65 <https://www.scimagojr.com/journalsearch.php?q=62932&tip=sid&clean=0>

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a. Kelengkapan unsur isi artikel (10%)	4					3
b. Ruang lingkup dan kedalaman pembahasan (30%)	12					11
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12					11
d. Kelengkapan unsur dan kualitas penerbit (30%)	12					11
Total = (100%)	40					36
Kontribusi Pengusul (Penulis Pertama)						21,6

KOMENTAR / ULASAN PEER REVIEW

<ul style="list-style-type: none"> Kelengkapan dan kesesuaian unsur 	<ul style="list-style-type: none"> Penulisan sesuai dan lengkap memenuhi unsur yang dinilai. Artikel sesuai dengan ketentuan publisher, yang meliputi: judul, nama dan institusi asal penulis, abstrak, pendahuluan, kajian pustaka, metode penelitian, pembahasan, kesimpulan, dan daftar pustaka. Isi artikel disampaikan dengan baik, yaitu adanya kesinambungan antar paragraph, dan mengalir dari fenomena, pembahasan secara umumsampai metode yang diusulkan ke analisis, diakhiri dengan kesimpulan yang memberikan implikasi manajerial dan saran untuk penelitian selanjutnya.
<ul style="list-style-type: none"> Ruang lingkup dan kedalaman pembahasan 	<ul style="list-style-type: none"> Substansi artikel cukup sesuai dengan ruang lingkup jurnal. Artikel membahas mengenai penelitian tentang analisis teknis, analisis ekonomi, analisis risiko investasi, analisis sosial, dan lingkungan penilaian dampak pembangkit listrik berbahan bakar limbah perkebunan kelapa sawit. Isi artikel cukup sesuai dengan ruang lingkup jurnal yang mempublikasikan, yaitu di bidang energi Referensi cukup sesuai dengan topik dan pembahasan, serta gap penelitian disampaikan secara jelas.
<ul style="list-style-type: none"> Kecukupan dan Kemutakhiran Data & Metodologi 	<ul style="list-style-type: none"> Data dan metodologi cukup baru dan ada kebaruaran. Eksperimen pembangkit listrik gasifikasi multi-tahap telah dilakukan sebelumnya pada skala pilot dengan kapasitas 10 kW [18,20,31]. Untuk memperkirakan nilai ekonomi dari pembangkit listrik skala mikro, dalam analisis, kapasitas ditingkatkan menjadi 100 kW. Dengan melakukan uji beda untuk mendapatkan perbedaan antara model nirlaba pada skala prototipe dan model yang menguntungkan dalam skala komersial.
<ul style="list-style-type: none"> Kelengkapan unsur dan kualitas penerbit 	<ul style="list-style-type: none"> Informasi jurnal internasional bereputasi terindeks: Scopus, Q1,SJR 2021 0,65 Jurnal berbahasa Inggris ini terbit konsisten, online ISSN 19961073, volume 15, issue 5, 1782, yang diterbitkan oleh: Multidisciplinary Digital Publishing Institute (MDPI). https://doi.org/10.3390/en15051782. Alamat Eb jurnal: https://www.mdpi.com/1996-1073/15/5/1782.

Indikasi plagiasi	<ul style="list-style-type: none">• Indikasi plagiasi masih dapat ditoleransi.• Atas dasar cek plagiasi menggunakan perangkat lunak Turnitin, nilai similarity index dari artikel ini adalah 3%. Dengan demikian tidak ditemukan indikasi plagiasi dalam artikel ini.
<ul style="list-style-type: none">• Kesesuaian bidang ilmu	<ul style="list-style-type: none">• Cukup sesuai dengan bidang ilmu pengusul, bidang ilmu akuntansi.• Substansi artikel yang mengimplementasikan Techno-Economic dan Sosial-Lingkungan Analisis cukup sesuai dengan bidang ilmu pengusul, yaitu ilmu Akuntansi

Semarang, 15 Mei 2

Reviewer 1



Prof. Dr. Abdul Rohman, M.Si, Akt
NIP 196601081992021001
Departemen Akuntansi FEB Undip
Jabatan Fungsional : Guru Besar

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b. Ruang lingkup dan kedalaman pembahasan (30%)	12					11,25
c. Kecukupan dan kemutakhiran data/informasi dan metodologi (30%)	12					11,50
d. Kelengkapan unsur dan kualitas penerbit (30%)	12					11,50
Total = (100%)	40					38,25
Kontribusi Pengusul (Penulis Pertama)						22,95

KOMENTAR/ ULASAN PEER REVIEW

• Kelengkapan dan kesesuaian unsur	Paper miliki kelengkapan dan kesesuaian unsur jurnal: ada judul, nama dan afiliasi penulis, abstract, info tentang proses publikasi (Received: 7 December 2021, Accepted: 19 January 2022, Published: 28 February 2022), introduction, material & methods, results & Discussion, Conclusion, dan references.
• Ruang lingkup dan kedalaman pembahasan	Paper ini mrp hasil riset multidisiplin, termasuk melibatkan kajian akuntansi manajemen. Paper ini membahas penggunaan informasi yang bersifat teknikal dan informasi akuntansi guna menganalisis manfaat penggunaan limbah perkebunan kelapa sawit berupa pelepah dan batang sebagai sumber energi. Temuan dibahas secara mendalam dengan melibatkan analisis teknis, analisis ekonomi, analisis risiko investasi, analisis sosial, dan analisis dampak lingkungan thd pembangkit listrik berbahan bakar limbah perkebunan kelapa sawit. Temuan menunjukkan bahwa pembangkit listrik berbahan bakar limbah perkebunan kelapa sawit layak secara teknis, ekonomi, risiko investasi, sosial dan lingkungan untuk digunakan sebagai sumber energi ramah lingkungan yang mendukung pendapatan masyarakat
• Kecukupan dan Kemutakhiran Data & Metodologi	Temuan didukung dengan data yang cukup lengkap dan mutakhir serta dianalisis dengan metode yang tepat sesuai dengan tahapan analisis dalam menilai kelayakan suatu teknologi. Metode analisis melibatkan berbagai sudut pandang baik aspek teknis, ekonomi, risiko investasi, sosial dan dampak lingkungan.
• Kelengkapan unsur dan kualitas penerbit	Editorial board berasal lebih dari 4 negara, SJR = 0.653, H-Index = 111. Subject area yang terdekat dengan akuntansi adalah Energy: Renewable Energy, Sustainability and the Environment. Jika mengacu pada subject area tsb jurnal ini masuk Q2.
Indikasi plagiasi	Tidak ada indikasi plagiasi. Uji Turnitin menunjukkan similarity index 3% (2% internet sources, 3% publication, 2% students papers). Setting Turnitin = exclude quotes & Bibliography ON, exclude matches < 1%

<ul style="list-style-type: none">• Kesesuaian bidang ilmu	Paper ini adalah hasil kajian multidisiplin dan masih sesuai dengan bidang ilmu pengusul yaitu akuntansi karena analisis melibatkan penggunaan informasi akuntansi dalam mengevaluasi kelayakan suatu teknologi. Beberapa referensi juga jelas mengklaim bahwa akuntansi pada dasarnya merupakan suatu teknologi yang rekayasa sesuai dengan konteks lingkungannya.

Semarang, 04 Juli 2022

Reviewer 2



Prof. Anis Chariri, S.E., M.Com., Ph.D., Akt.

NIP 196601081992021001

Departemen Akuntansi FEB Undip

Jabatan Fungsional : Guru Besar

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 - Distributed energy systems
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