DAFTAR PUSTAKA

Abdilah, Maulana Akbar dan Atikha Sidhi Cahyana. (2015). Analysis of Environmental Impact on Fertilizar Industry Using Life Cycle Assessment (LCA) Method. Procedia of Engineering and Life Science Vo.3 December. 2022.

Acero, A.P., Rodriguez, dan Ciroth, A. (2015). LCIA Methods-Impact Assessment Methods in Life Cycle Assessment and Their Impact Categories. GreenDelat, Germany.

Air Quality Science IAQ Resources Center (Aerias). 2005. Carbon Dioxide: A Common Indoor Air Pollutant. www.Aerias.com

Al Musyafak, A.Y., & Assomadi, A.F.(2022). Assessment of The Impact of air Emission on Petroleum Production in Company "A" using the Life Cycle Assessment (LCA) Method.Jurnal Purifikasi. Vol 21,No 2: 52-60.

An, J., Li, Y., Middleton, R.S., 2018. Reducing energy consumption and carbon emissions of magnesia refractory products: A life-cycle perspective. J. Cleaner Prod. 182 (1), 363-371.

Annisa, Naba Khoiru. 2022. Analisis Dampak Lingkungan Menggunakan Metode Life Cycle Assessment (LCA) Pada Instalasi Pengolahan Air (IPA) Gedek PT. Air Bersih Jatim. Universitas Islam Negeri Sunan Ampel.

Arba, Yasfina dan Suyono Thamrin. Journal Review: Perbandingan Pemodelan Perangkat Lunak Life Cycle Assessment (LCA) untuk Teknologi Energi. Jurnal Energi Baru & Terbarukan, 2022, Vol.3, No.2, pp 142-153.

Arianpour, F., Kazemi, F., Fard, F.G., 2010. Characterization, microstructure and corrosion behavior of magnesia refractories produced from recycled refractory aggregates. Miner.Enf. 23 (3), 273-276

Bhakar, V., K. Uppala., V.V., Digalwar, A.K., et al. 2013. Life Cycle Assessment oF Smithy Training Processes. Pro. Eng. 64 (2013) 1267-1275.

Batjos, P., 2004. Groundwater chemical composition changes in the Dubravsky Massif hydrogeological structure, included by magnesite exploitation. ActaPetrol. Sin. 20 (4), 887-898.

Canadian Center for Occupational and Health and Safety (CCOHS). 2005. Health Effects Carbon Dioxide gas. www.ccohs.ca/oshanswers/.

Mochammad, dan Revrian Fajhri Andana. Study Valuasi Smelter Pengolahan el Melalui Pendekatan Analisa Biaya Manfaat (Studi Kasus: Perusahaan

Tambang Nikel di Sulwawesi Selatan). Jurnal Teknik Lingkungan Vol.26, No.1 2020.

Conejo, A.N., Lule, R.G., Lopez, F., Rodriguez, R., 2006. Recycling MgO-C refractory in electric arc furnaces. Resour. Conserv. Recycl. 49 (1), 14-31.

Donald, J.R., Walsh, M.K., Burnham, C.D., et al. 1997. Dealing with Spent Refractories Material. Hatch Associates Ltd., Mississuga, ON.

Erliyanti, Lucky.2019. Pengaruh Temperatur *Sintering* Terhadap Densitas, Porositas, dan Kekuatan *Bending Lining Refractory* Berbasis Limbah Evaporation Boats. Fakultas Teknik.Universitas Negeri Semarang.

Fang, H., Smith, J.D., Peaslee, K.D., 1999. Stiudy of spent refractory waste recycling from metal manufactures in Missouri. Resour. Conserv.Recy.25, 111-124.

Ferreira, German, Lopez-Sabiron, A.M, Aranda Juan., et al. 2015. Environmental analysis for identifying challenges to recover used reinforced refractories in industrial furnaces. J. Clean. Prod. DOI: 10.1016/j.jclepro.2014.04.087

Frischknecht, R., Wyss, F., Knöpfel, S. B., Lützkendorf, T., dan Balouktsi, M. (2015). Cumulative energy Demand in LCA: The Energy Harvested Approach. *International Journal Life Cycle Assessment*, 20, 957-968.

Gaol, Martha Lumban. 2017. Life Cycle Assessment (LCA) Pengelolaan Sampah Pada Tempat Pemrosesan Akhir (TPA) Sampah. (Studi Kasus: TPA Jabon, Kabupaten Sidoarjo). Surabaya: Institut Teknologi Sepuluh Nopember.

Gunawan, Andi. 2023. Analisis Life Cycle Assessment (LCA) Pada Industri Minyak Nilam (Pathouli Oil) di PT Cassia CO-OP Kota Sungai Penuh Provinsi Jambi. Universitas Jambi.

Hanagiri, S. et al.2008. Recent Improvement of Recycling Technology for Refractories.Nippon Steel Technical Report.

Han, J., Jiao, F., Liu, W., et al., 2016. Innovative methodology for comprehensive utilization of spent MgO-Cr2O3 bricks: cooper flotation. ACS Sustain. Chem. Eng. 4 (10), 5503-5510.

Hauschild, M., Goedkoop, M., Guinee, J., Heijungs, R., Huijbregts, M., Jolliet, O., Margni, M., De Schryver, A., Humbert, S., Laurent, A., Sala, S., dan Pant, R. (2013). Identifying best existing practice for characterization modelling in life cycle impact assessment. *International Journal Life Cycle Assessment* 18, 683-697.

. T.R., Fahrurrozi, M., Bendiyasa, I.M., 2012. Life Cycle Assessment Pabrik ıen PT Holcim Indonesia Tbk. Pabrik cilacap: Komparasi antara Bahan Bakar ubara dengan Biomassa. Jurnal Rekayasa Proses, Vol.6, No.2.

Horckman, L., Nielsen, P., Dierckx, P., et al. 2019. Recycling of refractory bricks used in basic steelmaking : a review. Resources, Conservation & Recycling 140, 297-304.

IPCC, 2006. IPCC Guidelines for National Greenhouse Gas Inventories. Intergovermental on Climate Change (IPCC), 2006.

ISO, 2006a.ISO 14044- Environmental management- Life cycle assessment- Requirements and guidelines. International Standard Organization (ISO), Geneve.

ISO, 2006a.ISO 14040- Environmental management- Life cycle assessment- Principle and framework. International Standard Organization (ISO), Geneve.

Jiang, X.M., 2011. Study on Advanced Energy Conservation Technology for fused Magnesia Smelt from Magnesite and the Crystallization Process of Periclase (Master's Thesis). Northeastern University, Shenyang, China.

Jogdand, Surbhi Shivaji.2020. Some Study related to Refractory Waste Management in Sweden. KTH Royal Institute of Technology School of Industrial Engineering and Management School, Stockholm, Sweden.

Kelvin.2021. Analisis Dampak Lingkungan dari Perusahaan Jasa Konstruksi di Surabaya dengan *Software SimaPro*. Journal of Information System, Graphics Hospitality and Technology. Volume 03, Nomor 02. Departemen Teknik Industri. Institut Sains dan Teknologi Terpadu. Surabaya. (Accessed April 22,2023).

Khattab, M., Samya Hachemi dan Mohammad Fawzi Aljouni. 2021. Recycled Refractory Brick as Aggregate for Eco-friendly Concrete Production. J. Advance Sciences and Engineering Technologies. Vol 4 No 1, 32-49.

Lehtinen, H., Saarentaus, A, Rouhiainen, J., et al., 2011. A Review of LCA Methods and Tools and their Suitability for SMEs. Eorpe Innova Eco Innovation Biochem.

Li, J.H., Zhang, Y., Shao, S., Zhang, S.S., Ma, S.M., 2016. Application of cleaner production in a Chinese magnesia refractory material plant. J. Clean. Prod. 113, 1015-1023.

Madias, J., dan San Nicolas., 2017. A review on recycling of refractories for the iron and steel industry.

Masssachusetts Department of Public Health (MDPH). 2005. Appendix 1-Carbon Dioxide and its Use in Evaluating Adequacy of Ventilation in Buildings. Massachusetts Bureau of Environmental Health Assessment, Department of Public Health. www.mass.gov/dph/beha/iaq/appendices/co2app.htm.

A.I.M.2011.Life cycle analysis and life cycle impact assessment methodologies: table of the art. Universita de Lleida, Lleida.

., Soto, A., Maza, D., Bayon, F, 2020. Life cycle assessment of refractory waste

management in a Spanish steel works, 1-9.

Murti, Rihastiwi Setiya dan Sugihartono. 2020. Bahaya Kromium Hexavalen (Cr VI) Pada Kulit Dan Produk Kulit Samak Krom Serta Upaya Pencegahannya.Vol.14 No.2 Desember.

Mutiara, Shabrina Dyah. 2018. Penerapan Lean Thinking dan Life Cycle Assessment (LCA) untuk Meningkatkan Eco-Efficiency Pada Produk Backsheet Diapers. Intitut Teknologi Sepuluh Nopember.

National Institute for Occupational Safety and Health (NIOSH). 1976. Criteria for a Recommended Standard, Occupational Exposure to Carbon Dioxide.

Pré Consultants, 2016. SimaPro. https://simapro.com/ (Accessed 30/04/2023)

Pré Sustainability. 2023. SimaPro Database Manual Methods Library.

Putri, H.P.2017. Life Cycle Assessment (LCA) Emisi Pada Proses Produksi Bahan Bakar Minyak (BBM) Jenis Bensin Dengan Pendekatan Metode Analytical Hierarchy Process (AHP). *Institut Teknologi Sepuluh November.Surabaya*.

Rahmat, Muhammad Rais.2021. Perancangan dan Pembuatan Tungku *Heat Treatment*. Universitas Islam 45, Bekasi.

Rahmatika, Nur Ikhsani. 2017. Analisis Risiko Paparan Nitrogen Dioksida (NO2) Dari Polutan Ambien Terhadap Kesehatan Masyarakat di Kabupaten Magelang Tahun 2015. UIN Syarif Hidayatullah Jakarta.

Rosmeika, R., Sutiarno, L., dan Suratmo, B. (2010). Pengembangan Perangkat Lunak Life Cycle Assessment (LCA) untuk Ampas Tebu (Studi Kasus di Pabrik Gula Madukismo, Yogyakarta). Universitas Gadjah Mada Yogyakarta.

Rosyid, Anwar. (2022). Kajian Dampak Lingkungan dari Proses Produksi Pulp dengan Metode LCA: Evaluasi Program Perbaikan Eksisting. Institut Teknologi Sepuluh Nopember.

Ruhiat, Y., dan Akbar, H. (2015). Treatment Limbah Industri Pulp dengan Metode Filtrasi untuk Menjaga Kualitas Air DAS Ciujung. Jurnal Agrium, 12 (1), 40-43.

Sampe, Ovrianty Fery. 2018. Evaluasi Penambahan Silica Flux (SiO2) dan Scrap Terhadap Proses Produksi si Converter#2 PT Vale. Indonesia Tbk. Politeknik ATI Makassar.

Sari, April Lianita.2019. Pengaruh Thermal Shock Resistance dan Komposisi Bahan Refraktori Terhadap Kekuatan Impact dna Struktur Makro. Fakultas Teknik. verstitas Negeri Semarang.

.D., Fang, H., Peaslee, K.D., 1999. Characterization and recycling of spent actory wastes from metal manufactures in Missouri. Resour. Conserv. Recycl.

25, 151-169.

Sukarlina, Nina dan Iphov Kumala Sriwana. 2022. Perancangan Sistem untuk Minimasi Limbah B3 di PT. XYZ Menggunakan Pendekatan SSM (*Soft System Methodology*). Jurnal Metris 23, 44-51.

Toding, Nataniel. 2016. Mengoperasikan Pierce Smith Converter. Modul-PP-COV-CP-09. PT Vale Indonesia Tbk.

Toxicology Review of Selected Chemicals.2005. Carbon Dioxide. OSHA's comments from the January 19,1989 Final on Air Contaminants Project. www.cdc.gov.

Trisnawati, O.R., & Khasanah, N. 2020. Penyuluhan Pengelolaan Sampah Dengan Konsep 3R Dalam Mengurangi Limbah Rumah Tangga. Cakrawala, 4 (2), 153-168.

WHO. (2013). Health Effects of Particulate Matter. World Health Organization, Copenhagen, Denmark.

Widiyanto, Anugerah. 2022. Kontribusi Metode Life Cycle Assessment Biomassa untuk Agroindustri Berkelanjutan. Badan Riset dan Inovasi Nasional (BRIN).

Wu, X.Y., 2007. The countermeasures for controlling magnesia pollution. Environ. Prot. Sci. 33 (5), 11e12, 20.

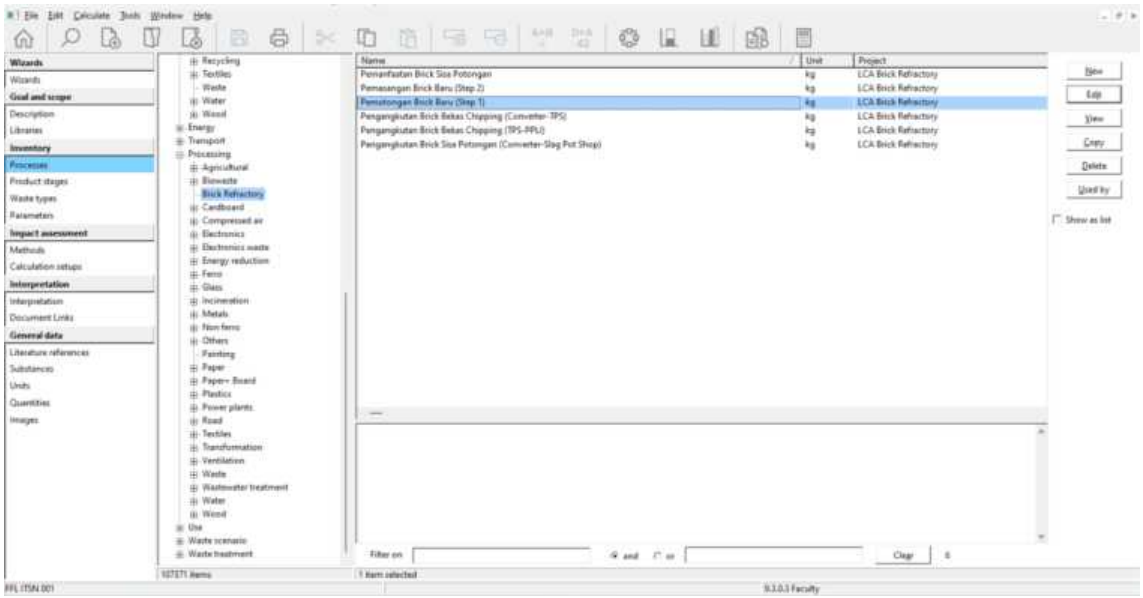
Xue, K., Han, J., Jiao, F., et al., 2018. Comprehensive utilization of spent magnesia-chrome refractories with gravity separation followed by flotation. J. Min. Eng. Soc. 127, 125-133.

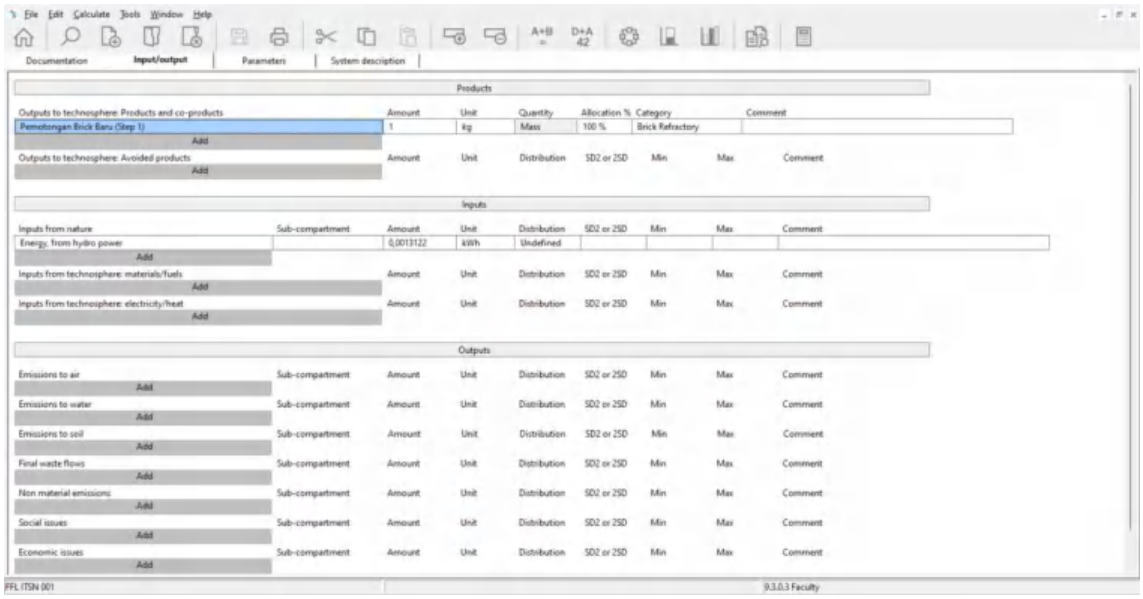
Yang, D., Zeng, D.H., Zhao, Q., 2009. Soil contamination by magnesite dusts: its mechanism and phytoremediation. Chin. J. Ecol 28 (9), 1891-1896.

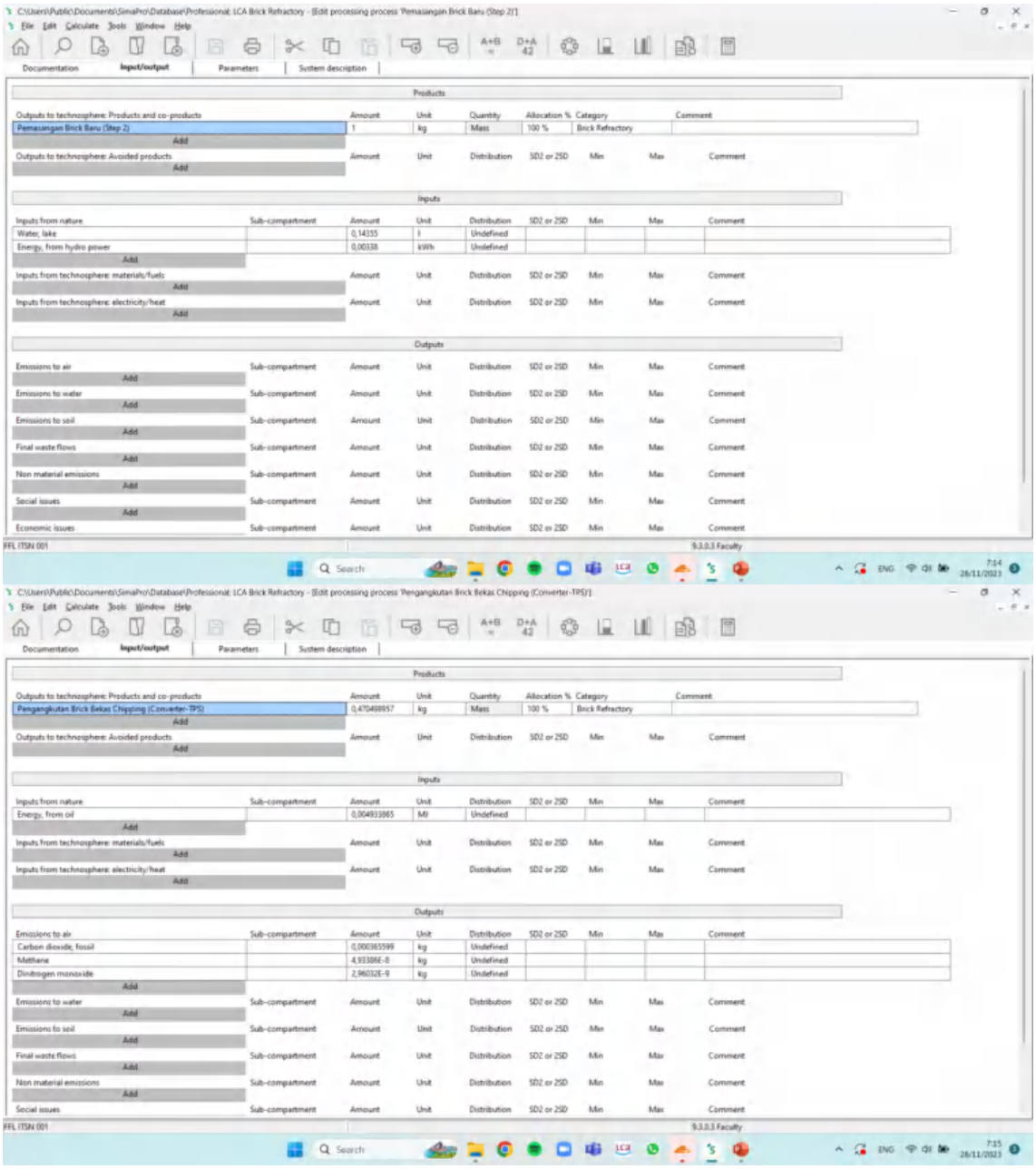
2021.PP Republik Indonesia Nomor 22 Tahun 2021 tentang Penyelenggaraan Perlindungan dan Pengelolaan Lingkungan Hidup. Jakarta.

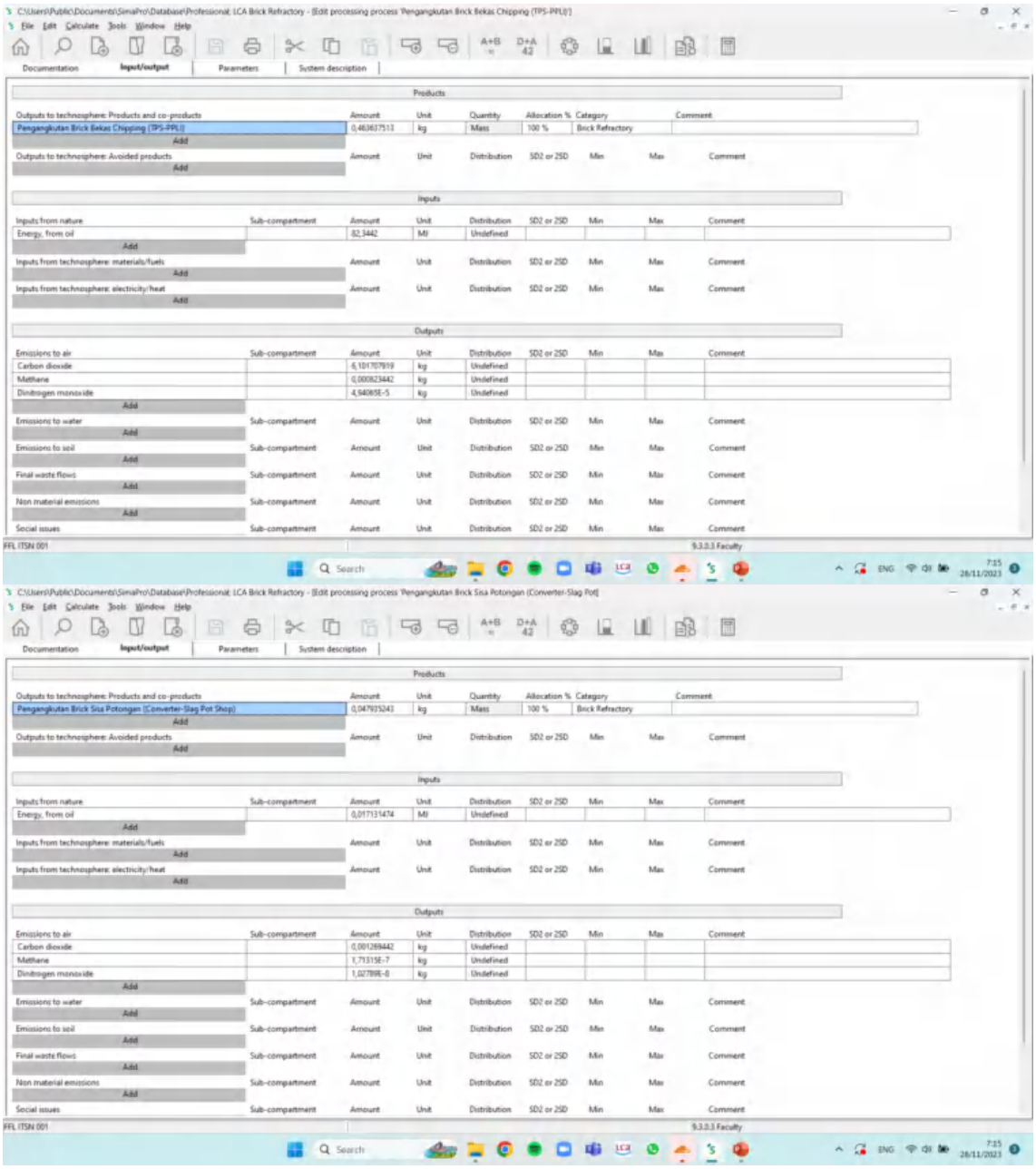
LAMPIRAN

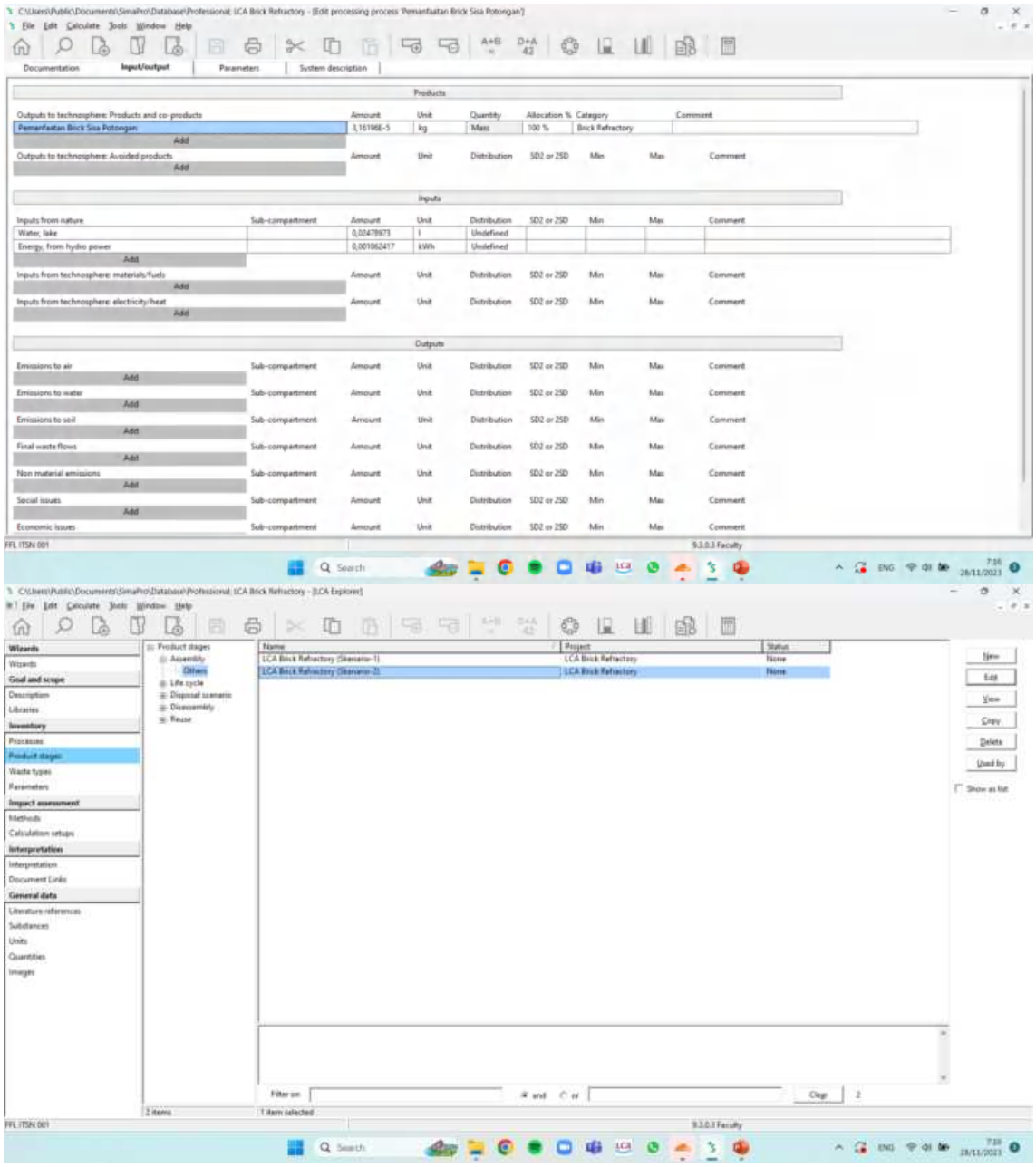
Lampiran 1 Tahapan *running* data di SimaPro

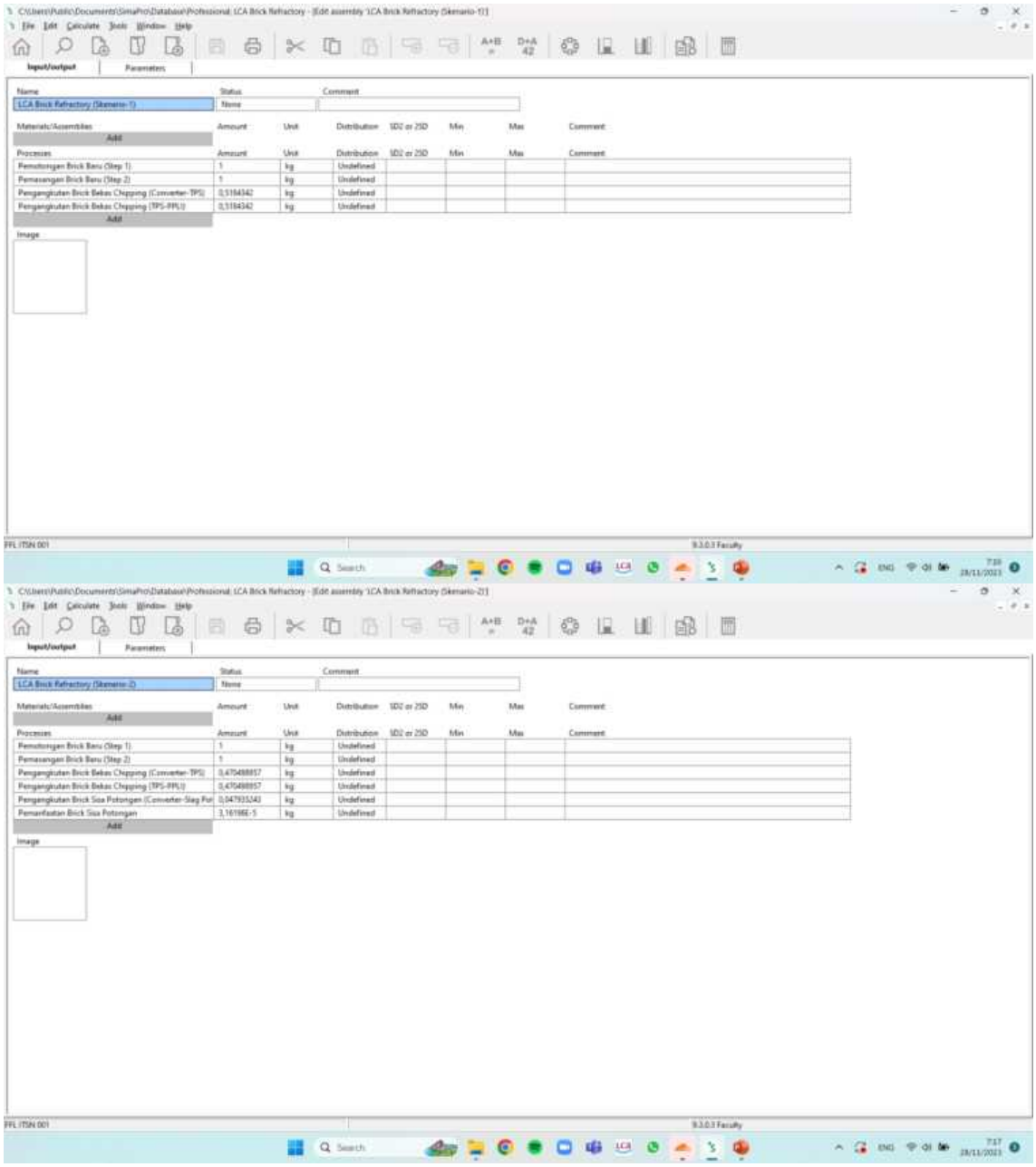


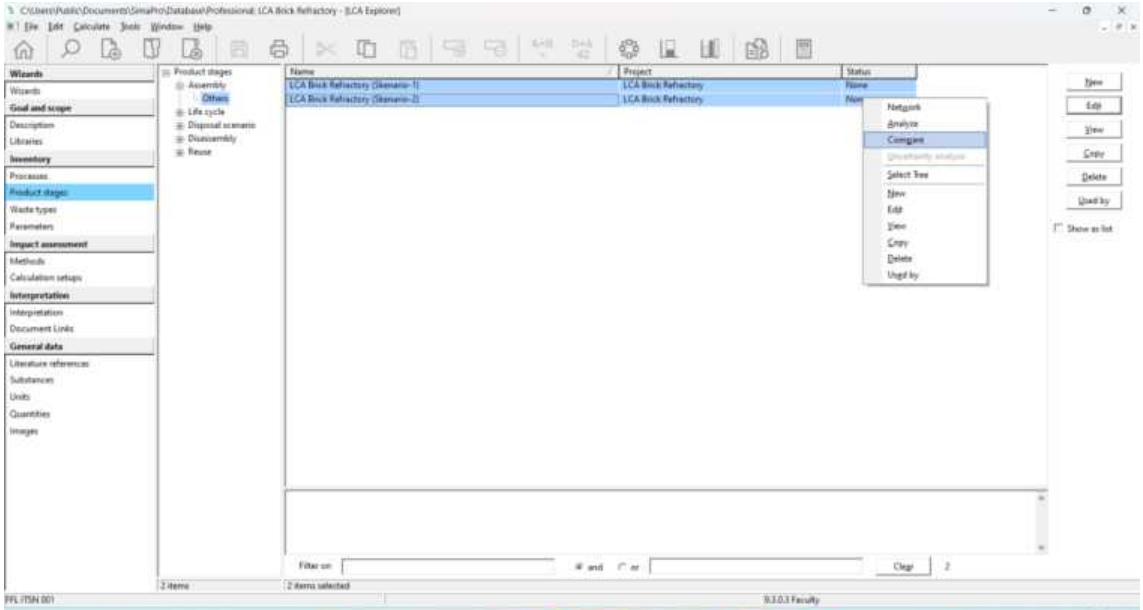


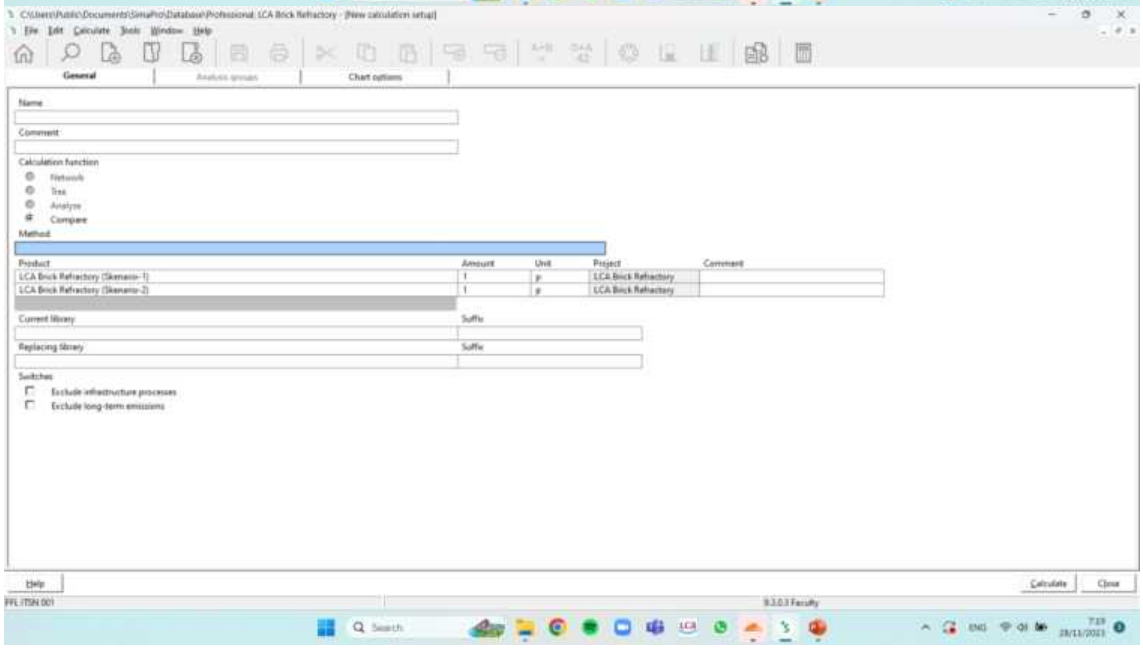


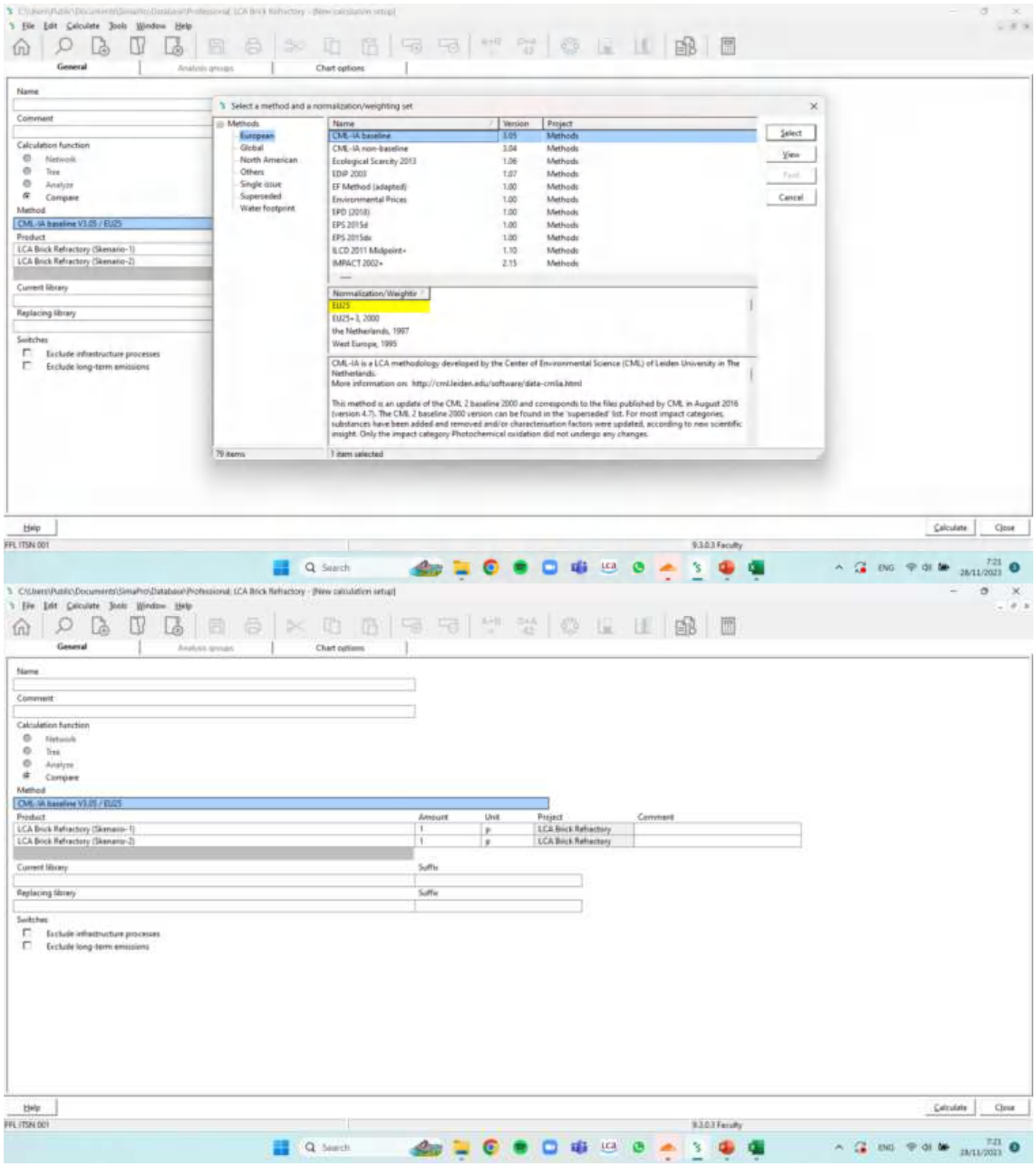


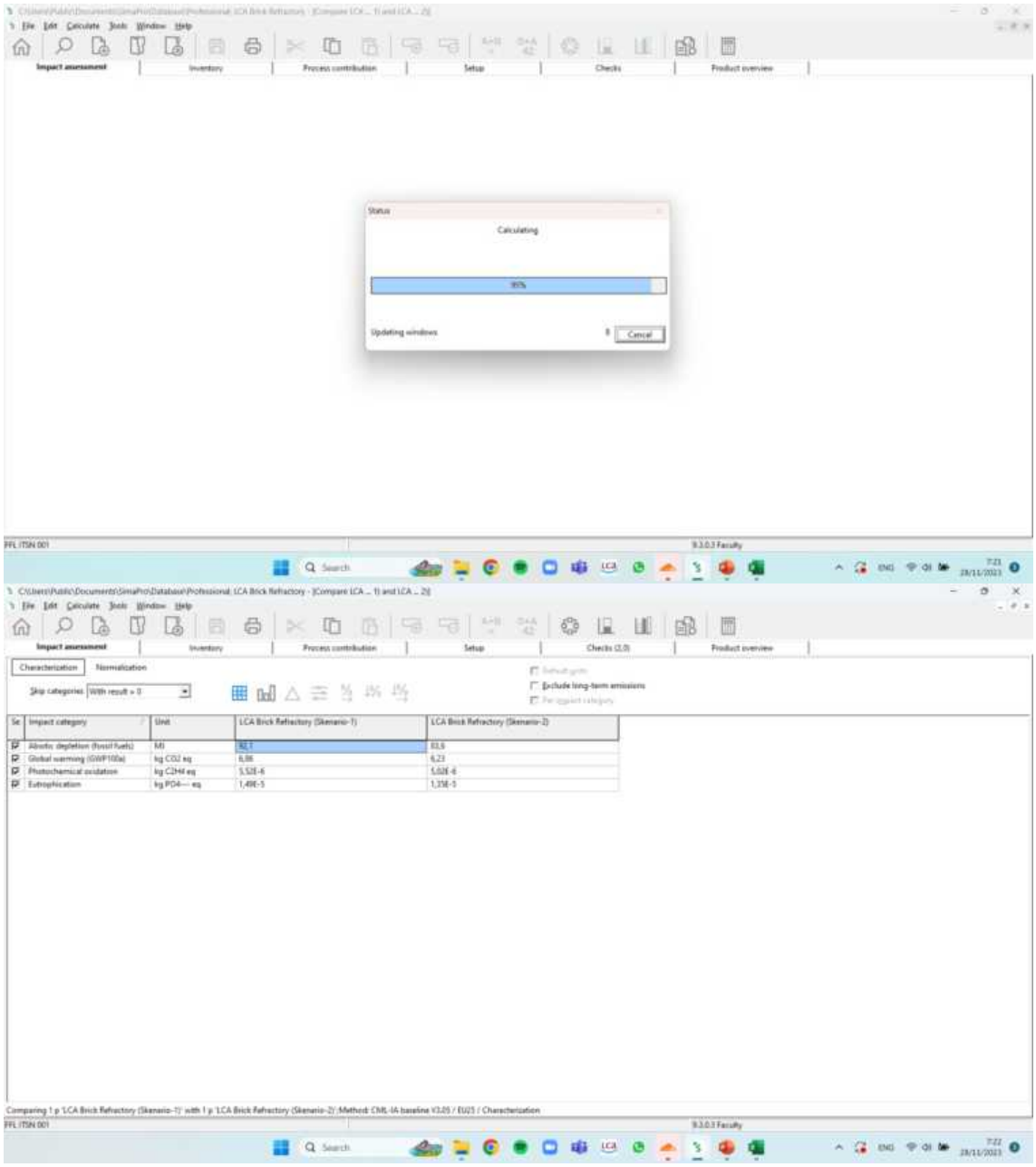


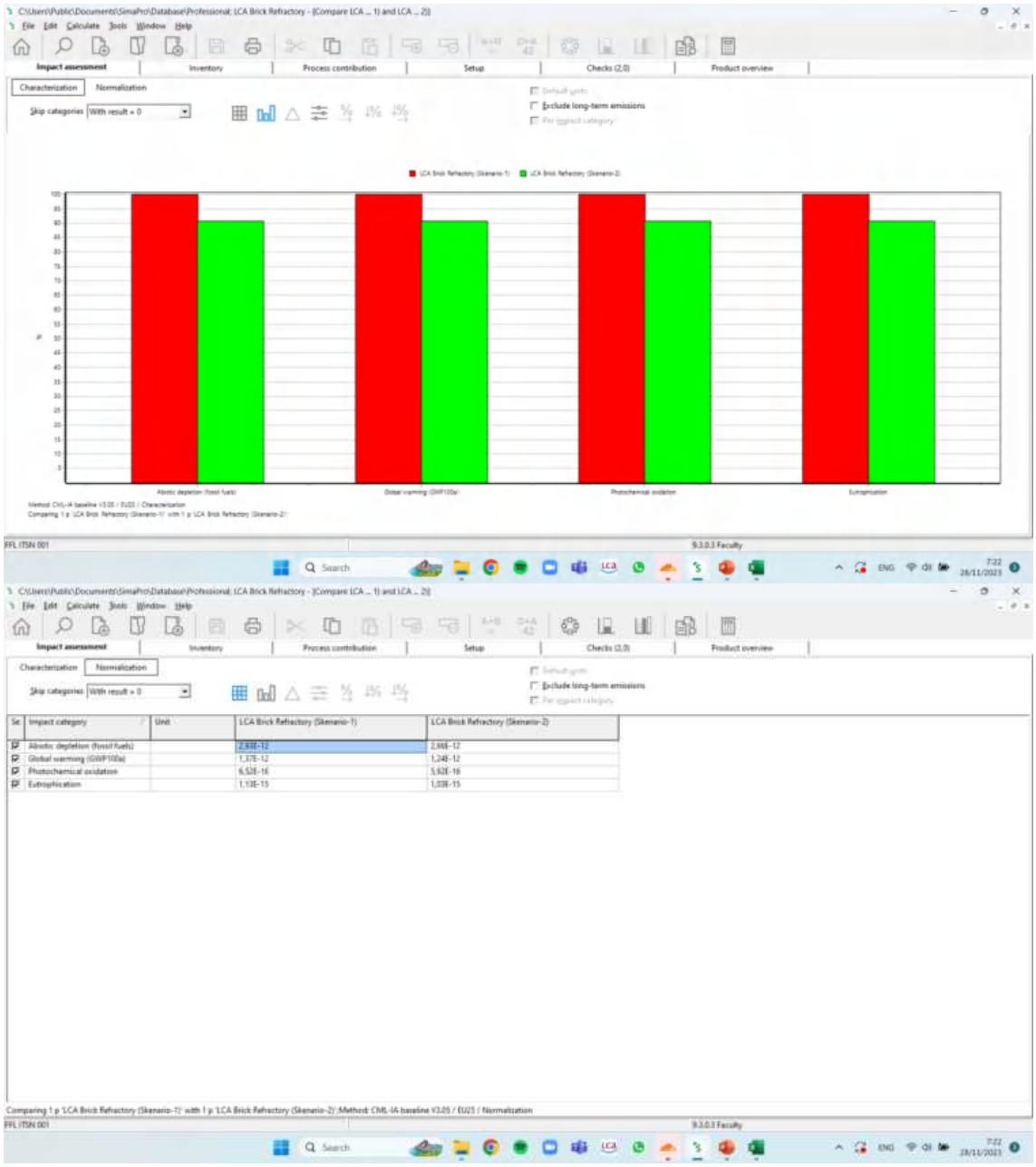


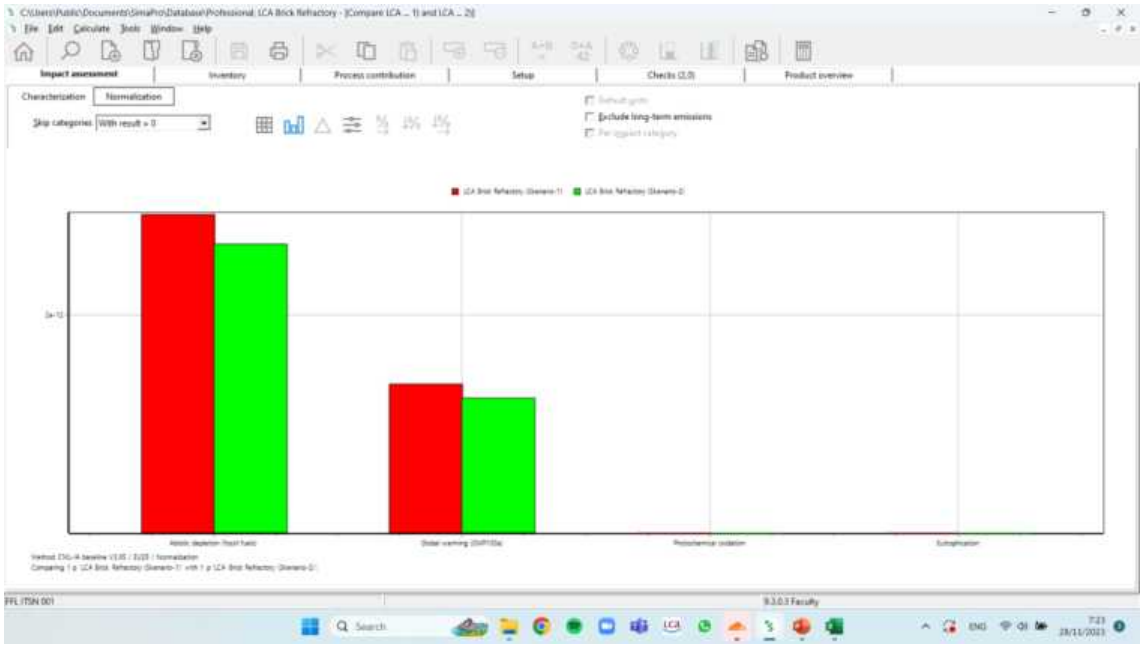












Lampiran 2 Tahapan penggunaan kembali brick bekas sisa potongan pada ladle penampung converter matte

Lampiran 3 Izin Penelitian

KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET DAN TEKNOLOGI
UNIVERSITAS HASANUDDIN
FAKULTAS TEKNIK
PROGRAM STUDI S2 TEKNIK LINGKUNGAN
Jl. Poros Malino Km. 6, Bontomarannu (92172) Gowa, Sulawesi Selatan,
Telp. (0411) 586015,586262 Fax (0411) 586015,
http://eng.unhas.ac.id Email : teknik@unhas.ac.id

Nomor: 530/UN4.7.7/PT.01.04/2023 6 Januari 2023
Hal : Permohonan Izin Penelitian / Pengambilan Data

Kepada Yth.
PT Vale Indonesia Tbk

Dengan hormat, kami sampaikan bahwa dalam rangka penyelesaian proposal pada Program Studi S2 Teknik Lingkungan Fakultas Teknik Universitas Hasanuddin, maka kami mohon kebijaksanaan Bapak/Ibu kiranya berkenan memberikan kesempatan melakukan pengambilan data penelitian bagi mahasiswa :

Nama (NIM) : Fauziah Nur Aisyah (D092211006)

Atas perhatian dan kerjasama yang baik kami sampaikan terima kasih.

Ketua Program Studi S2 Teknik Lingkungan,

Dr. Roslinda Ibrahim, S.P., M.T.
NIP. 197506232015042001

Tembusan :
1. Ketua Program Studi S2 Teknik Lingkungan FT-UH
2. Arsip