



LAMPIRAN

Lampiran 1: Slip Tagihan Listrik Universitas Pertahanan

 PT. PLN (PERSERO) UID JAWA BARAT UP3 GUNUNG PUTRI ULP CITEUREUP	INFORMASI TAGIHAN LISTRIK																																																																	
	PT. PERUSAHAAN LISTRIK NEGARA (PERSERO) Jl Tunjoojo Blok M 1 / 135, Matawa Kebayoran Baru - Jakarta Selatan NPWP : 01.001.629.3-051.090																																																																	
Kepada Yth : UNIVERSITAS PERTAHANAN KP TANGKIL RT.1 RW.1 TANGKIL	Id Pelanggan : 538613744189 Rekening Bulan : 11-2021 Tarif / Daya : P2 / 1,940,000 VA Tarif / Daya Lama : / 0 VA FKM kWh/Varh/FRT : 2,400 / 2,400 / 1 FKM kWh/Varh/FRT LM : 2,400 / 2,400 / 1 Jenis Nyala / Fak K : 100																																																																	
No Invoice : 538613744189-1121 NPWP : 00.000.000.0-000.000 Nama Sesuai NPWP : Alamat Sesuai NPWP : NIK :																																																																		
<table border="1"> <thead> <tr> <th>Catatan Meter</th> <th>Tanggal</th> <th>LWBP</th> <th>WBP</th> <th>TOTAL</th> <th>KVARH</th> </tr> </thead> <tbody> <tr> <td>St Akhir</td> <td>01-11-2021</td> <td>5,457,300</td> <td>730,840</td> <td></td> <td>2,691,060</td> </tr> <tr> <td>St Awal</td> <td>01-10-2021</td> <td>5,385,990</td> <td>721,390</td> <td></td> <td>2,662,810</td> </tr> <tr> <td>Selisih Stand (st akhir - st awal) * FKM * FRT</td> <td></td> <td>171,144,000</td> <td>22,680,000</td> <td></td> <td>67,800,000</td> </tr> <tr> <td>Pemakaian kWh Total</td> <td></td> <td>171,144,000</td> <td>22,680,000</td> <td>193,824,000</td> <td>67,800,000</td> </tr> </tbody> </table>			Catatan Meter	Tanggal	LWBP	WBP	TOTAL	KVARH	St Akhir	01-11-2021	5,457,300	730,840		2,691,060	St Awal	01-10-2021	5,385,990	721,390		2,662,810	Selisih Stand (st akhir - st awal) * FKM * FRT		171,144,000	22,680,000		67,800,000	Pemakaian kWh Total		171,144,000	22,680,000	193,824,000	67,800,000																																		
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3. Rupiah PTL Bruto * Rp 212,504,768 4. Rupiah Kompensasi TMP Rp 0 5. Jumlah PTL Netto Rp 212,504,768 6. Jumlah Rupiah Penakalan Tenaga Listrik (PTL) yang ditagihkan Rp 212,504,768 7. Tagihan Lainnya Rp 0 8. Jumlah Rupiah Penakalan Tenaga Listrik (PTL) Rp 212,504,768 9. PPN Rp 21,250,477 Total Penyerahan Listrik Rp 212,504,768																																																																		
PPN DIBEBAKAN SESUAI PP NOMOR 48 TAHUN 2020																																																																		
II Pajak Penerangan Jalan (PEMDA) (1,1% X PTL Netto) PTL (%) x 212,504,768 Rp 0																																																																		
III Penyerahan Non Listrik 1. Sewa Trafo / Pemakaian Trafo / Sewa Kapasitor / Operasi Parsial, dll Rp 0 2. PPN Rp 0 Total Penyerahan Non Listrik Rp 0																																																																		
IV Jumlah Tagihan (I + II - III) Rp 212,504,768																																																																		
TERBILANG Dua Ratus Dua Belas Juta Lima Ratus Empat Ribu Tujuh Ratus Enam Puluh Delapan Rupiah																																																																		
Batas Akhir Masa Bayar 20 November 2021 Status : BELUM LUNAS (11) Tanggal Bayar : // Biaya Keterlambatan (BK) : Rp. 0 Tagihan belum termasuk Besa Meterai sebesar Rp. 10.000																																																																		
<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> TAGIHAN LISTRIK BELUM LUNAS BIAYA BELUM DIBAYAR </div> <div style="text-align: right;">  </div> </div>																																																																		
Keterangan : A = Tarif/Daya Baru TTL Baru B = Tarif/Daya Lama TTL Baru C = Tarif/Daya Baru TTL Lama D = Tarif/Daya Lama TTL Lama																																																																		

Informasi Tagihan Listrik ini berlaku sebagai dokumen tertentu yang kedudukannya dipersamakan dengan Faktur Pajak sesuai dengan Peraturan Direktur Jenderal Pajak No. PER-10/PJ/2010 sebagaimana telah diubah terakhir dengan Peraturan Direktur Jenderal Pajak No. PER-33/PJ/2014.

* Sudah termasuk stimulus/relaksasi

Lampiran 2: Daftar Harga Komponen PLTS

LAMPIRAN BERITA ACARA PEMERIKSAAN DAN PEMERIKSAAN PEKERJAAN
NOMOR : BA-RBOR/MP/13/ENERG/0015
TANGGAL : 12 Agustus 2015

URAIAN KEBIDATAN

NO	NAMA BARANG	SPEKIFIKASI	JML TRAK	JML RM	SAT	H. SATUAN Rp.	JUMLAH Rp.
1	Solar modul 250W/1kg/1kg	Maximum Power 250 W Maximun Voltage 30.8 V Maximum Current 8.17 A Cell Conversion Rate 17.4 %	120	120	Kegrc	3,948,091	473,850,909
2	Baterai tipe Gel maintenance free battery 12V/250AH	Rated Voltage 12 V Rated Capacity 250 Ah Serial 68 kg	80	80	Buah	6,141,818	369,500,001
3	Charge In Control	Battery Charge Voltage 240 V Battery Voltage Output 12 V Environment Operating Temperature Range -25OC to +50OC Storage Temperature Range -40OC to +70OC Humidity Max 90% Protection IP21	1	1	Buah	36,453,636	36,453,636
4	30KW On-Off Grid Smart inverter	AC Side Rated Output Power 30000 W AC Output Current 45 A Rated AC Output Voltage 380 V AC Output Range 342 -418 V Standby Power <15 W Continuity RS 485 Shutdown Switch < 5 ms DC Side Max Input Current 89 A No String 1 No MPPT Trackers 1 Input Solar Voltage 330-420 V Solar Connection C45 Max Efficiency 95 % MPPT Efficiency 95 % Power Factor > 0.99	1	1	Buah	485,027,273	485,027,273
5	Smart Combiner Box	Input Range DC +/- 20A Protection Time 1s Measurement Accuracy PV Cell measurement 0.5 grade, analogue value 0.2 grade RS 485 Communication RS 485 Modbus- RTU Working Environment 2 Group Relay SPAC250V Altitude 3 Group Outputs Shunt Input Insulation Resistance >100M Aux Power Supply AC 85V - 265 V or DC 300V - 680 V or DC24V Protection Grade IP65 Weight 30 kg Dimension (WxHxD) 700 x 575 x 220 mm	1	1	Buah	4,203,455	4,203,455
6	Solar Panel Rack Substake for 30KW	Bahan Bracket Hot Galvanize Steel	20	20	Buah	4,808,364	96,167,273

NO	NAMA BARANG	SPEKIFIKASI	JML TRAK	JML RM	SAT	H. SATUAN Rp.	JUMLAH Rp.
7	Aksesori (kabel, Junction Box, Panel, Ruman Battery, Data Logger dll)	Kabel NYA 4 x 25 mm ² 50 m Kabel NYA 1 x 25 mm ² 50 m Kabel NYA 4 x 16 mm ² 100 m Kabel NYNY 2x4 mm ² 250 m Kabel NYAF 1x25 mm ² 50 m	1	1	Luf	307,663,636	307,200,000
Jumlah							1,754,807,273
Jumlah (Rp)							176,486,727
Jumlah (Rp)							1,830,293,999
Jumlah (Rp)							1,830,293,999

Tersambung Satu Miliar Sembilan Ratus Tiga Puluh Juta Tiga Ratus Empat Puluh Tiga Ribu Rupiah

SUKTI PEMASUKAN
No. /M/VEU/BU/2015
Barang-barang tersebut telah diterima dengan baik dan lengkap seperti tertera di dalam Berita Acara ini dan telah dibuktikan dalam Buku Pengantar.
Tanggal: 12 Agustus 2015

Ujang Suprieman
Lesah Cpm Nrp. 2193038800080

Mengotahai/Mengotahai
R. Restor
Universitas Padjadjaran Indonesia

Suprieman Djapar, S.Sos., M.M.Si (Hart)
Mereskai Muda TR

Bagik, 12 Agustus 2015
TIM PEMERIKSAAN-INSPEKSI

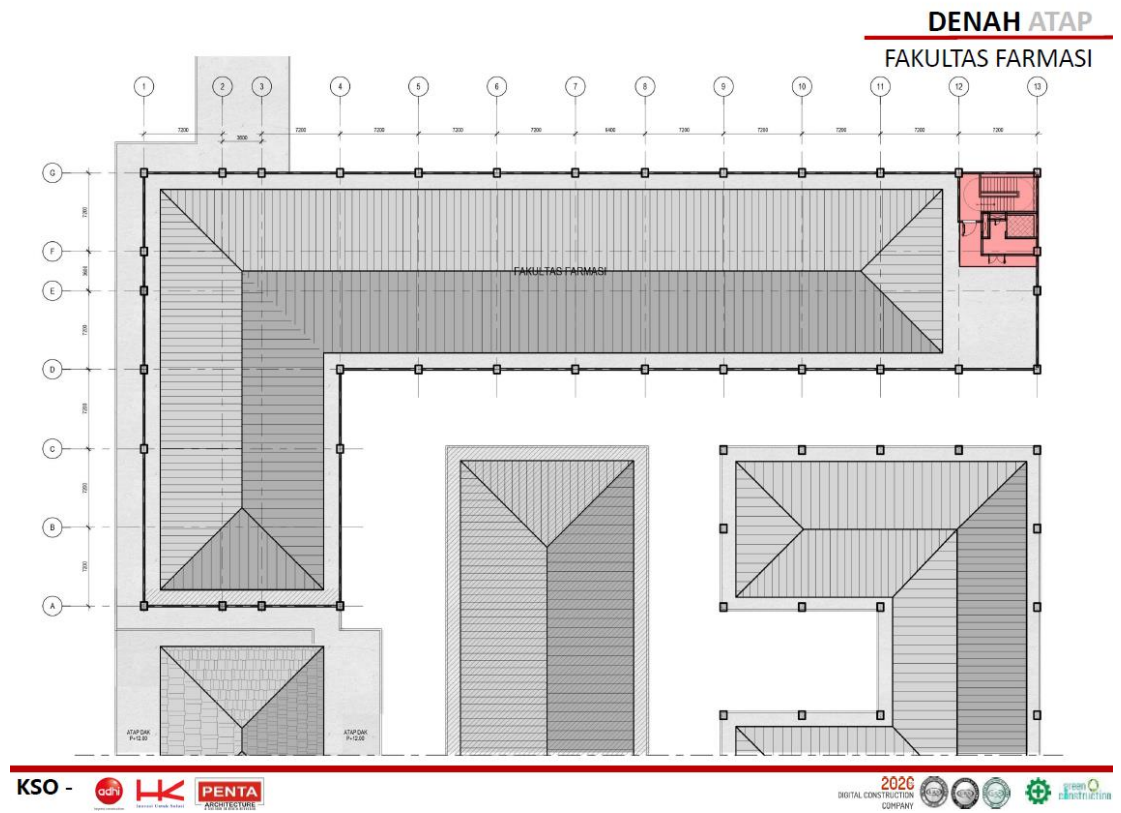
- H. Risa Yusuf, M.M.
Kasimul Q. Nofri, S.H.
- Dio Teguh Setiawan, SE
Pemerik N/UT/3890210196001000
- Rudi Setia Hamboko, A.MJ
Pemerik N/UT/3890210196001000
- Ujang Suprieman
Lesah Cpm Nrp. 2100003800080
- Al Ansh
Pemerik N/UT/3890210196001000



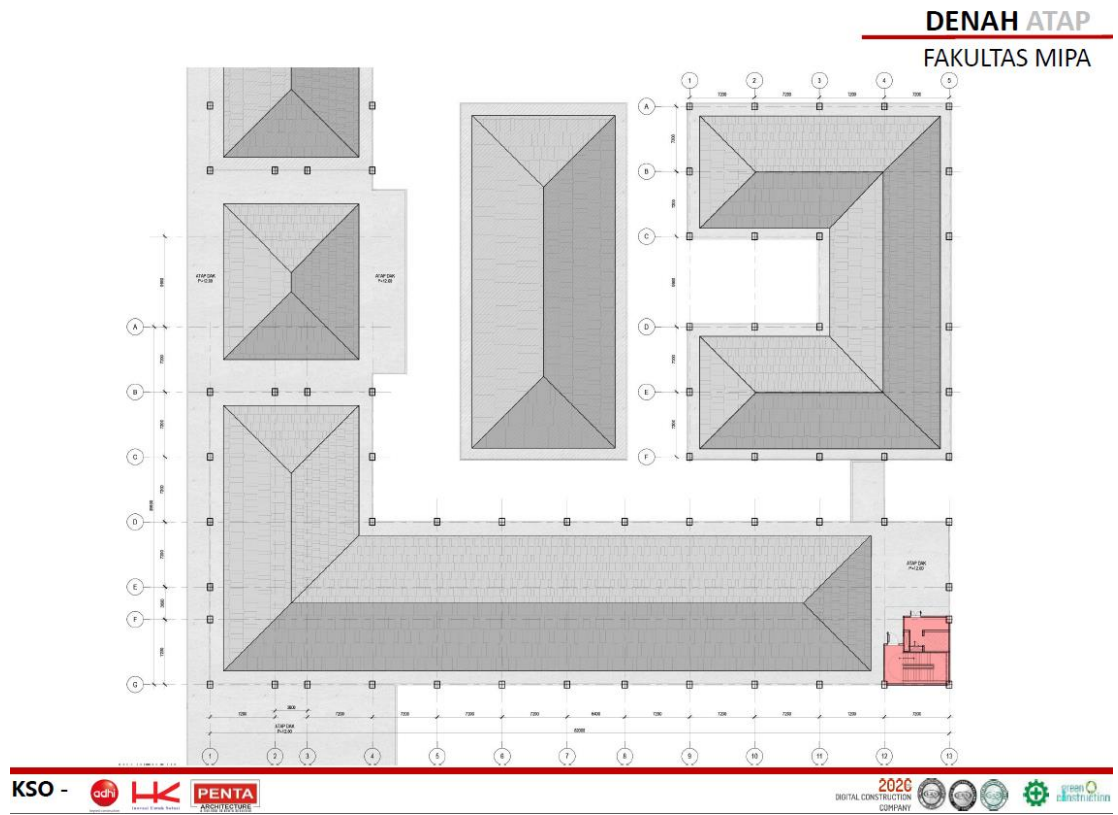
Lampiran 3: Invoice Pembelian Komponen PLTS Tahun 2015

INVOICE		INDOSPEC OIL & ENERGY				
Menara Kadin Indonesia Lt. 26 Suite E Jl. HR. Rasuna Said Kav. X-5, No. 2 – 3 Jakarta 12950 Telephone : 021 - 5274714, Fax : 021 - 5274761, Web : www.indospec.com						
CUSTOMER'S NAME & ADDRESS Universitas Pertahanan (UNHAN) Kampus UNHAN di Kawasan IPSC Sentul Bogor		Invoice Date : August 14, 2015 Invoice No. : Inv-Ind.0815-032 Payment Due Date : Immediate				
		Contact for this Invoice: Annisa / Liza (Accounting and Finance)				
NO.	Referensi	DESCRIPTION	QTY	UNIT	PRICE (IDR)	Amount (IDR)
1	No. Kontrak: TRAK/13/II/ENERG/2015/U NHAN	Pembayaran pekerjaan Pengadaan Energi Terbarukan Dengan Solar Shell UNHAN di Kawasan IPSC Sentul Bogor The Following Details : 1. Solar Modul 250Wp/keping 2. Baterai tipe Gel maintains-free battery, 12V/250AH 3. Charge in Control 4. 30KW On-Off Grid Smart Inverter 5. Smart Combine Box 6. Solar Panel Rack Suitable for 30KW, Rooftop Type, will design according the user rooftop's drawing 7. Aksesoris (Kabel, Junction Box, Panel, Rumah Battery, Data Logger, dll)	120 60 1 1 1 20 1	keping buah buah buah buah buah set	3,949,091 6,141,818 39,483,636 465,027,273 4,325,455 4,826,364 307,093,636	473,890,009 368,509,091 39,483,636 465,027,273 4,325,455 96,527,273 307,093,636
Total net value excl. tax and fee						1,754,857,273
VAT 10%						175,485,727
Total net value incl. tax and fee (IDR)						1,930,343,000
In Words : Satu Miliar Sembilan Ratus Tiga Puluh Juta Tiga Ratus Empat Puluh Tiga Ribu Rupiah						
PAYMENT INSTRUCTION : Payment should be transferred to our account : PT INDOSPEC Bank BRI - Cabang Mal Ambassador IDR Account : 1223.01.000.273.309			Authorized Signature  (Em Rahman Putra)			

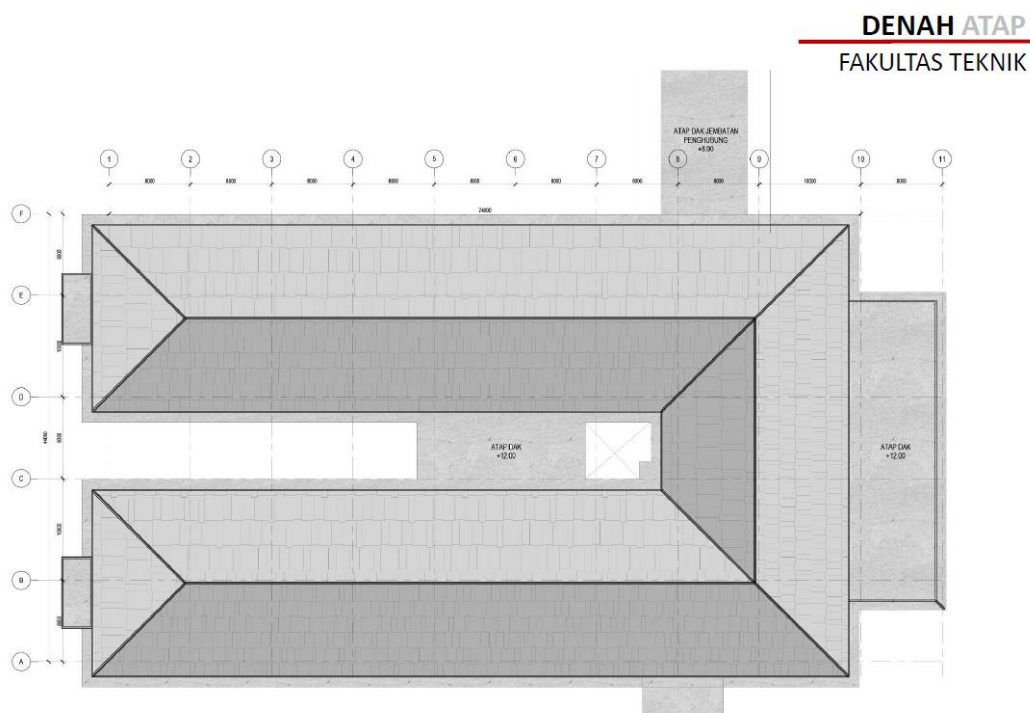
Lampiran 6: Luas Atap Gedung Fakultas Farmasi



Lampiran 7: Luas Atap Gedung Fakultas MIPA



Lampiran 8: Luas Atap Gedung Fakultas Teknik



Lampiran 8: Data dari Global Solar Atlas (1)

GLOBAL SOLAR ATLAS

BY WORLD BANK GROUP

Sukahati

-06.525583°,106.87975°

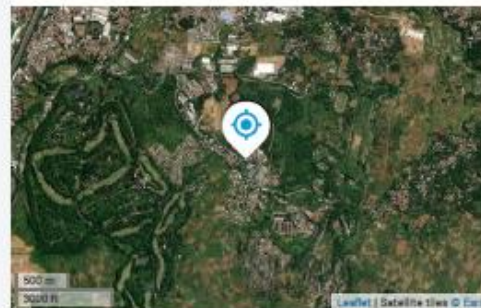
Anyar, Sukahati, West Java, Indonesia
Time zone: UTC+07, Asia/Jakarta (WIB)

Report generated: 26 Oct 2021

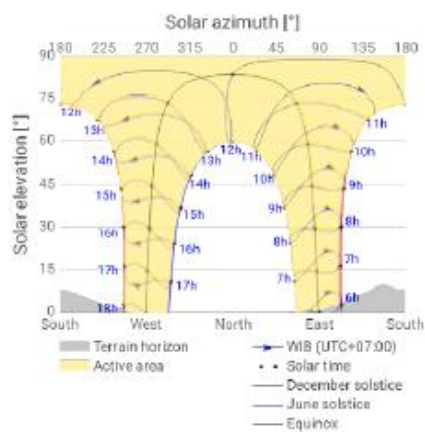
SITE INFO

Map data		Per year
Specific photovoltaic power output	PVOUT specific	1384.4 kWh/kWp
Direct normal irradiation	DNI	1021.1 kWh/m ²
Global horizontal irradiation	GHI	1724.0 kWh/m ²
Diffuse horizontal irradiation	DIF	954.7 kWh/m ²
Global tilted irradiation at optimum angle	GTT opta	1749.1 kWh/m ²
Optimum tilt of PV modules	OPTA	11 / 0 °
Air temperature	TEMP	25.4 °C
Terrain elevation	ELE	260 m

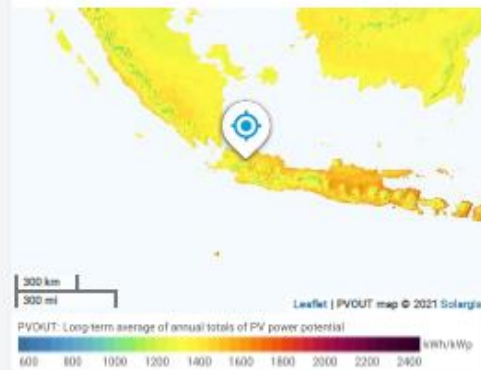
Map



Horizon and sunpath



PVOUT map



Lampiran 8: Data dari Global Solar Atlas (2)

GLOBAL SOLAR ATLAS
BY WORLD BANK GROUP

