



# TRANSFORMASI

## PENGEMBANGAN BISNIS & SDM PERTAMINA

Senin, 10 Agustus 2020

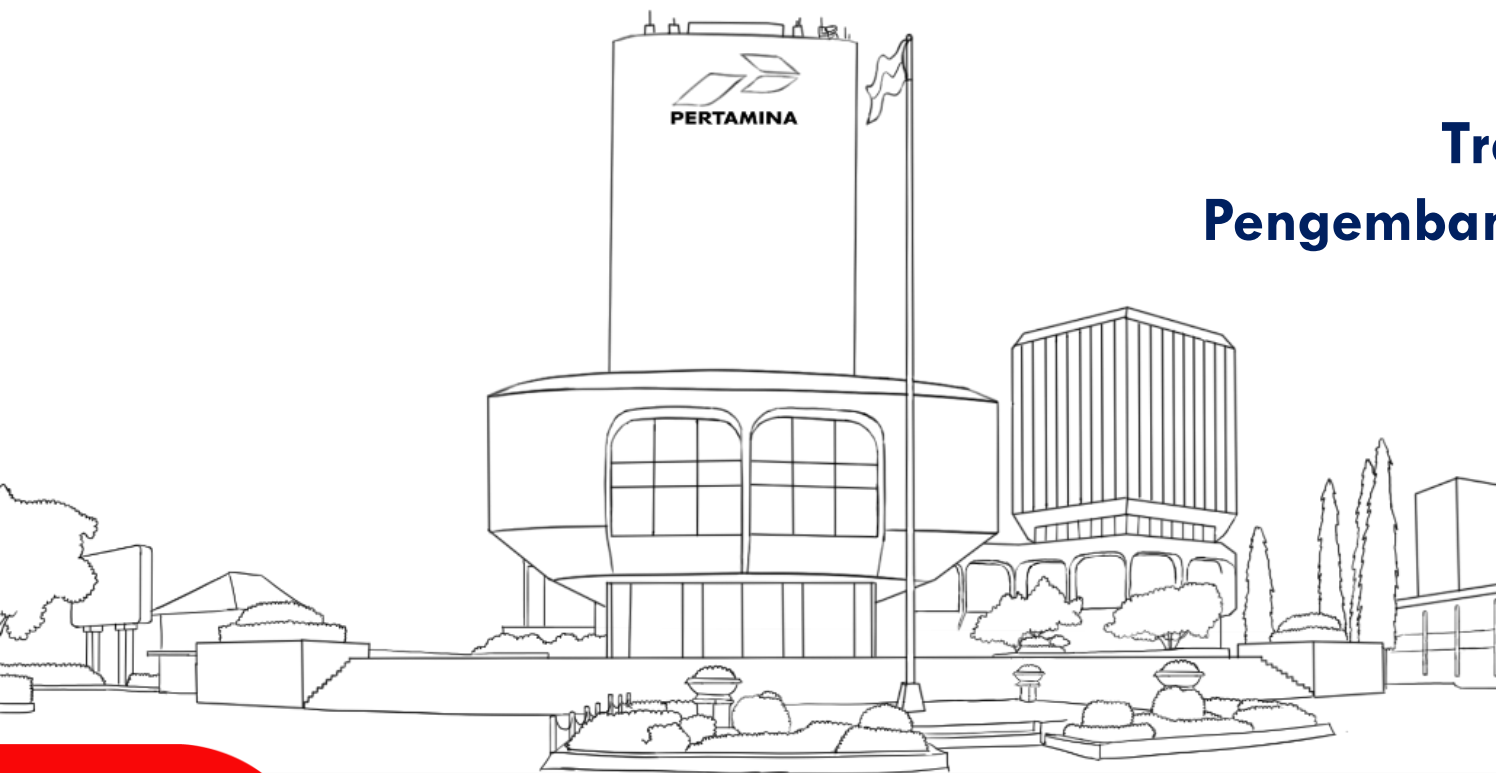
# AGENDA

01

**Transformasi  
Pengembangan Bisnis**

Transformasi  
Pengembangan SDM

02



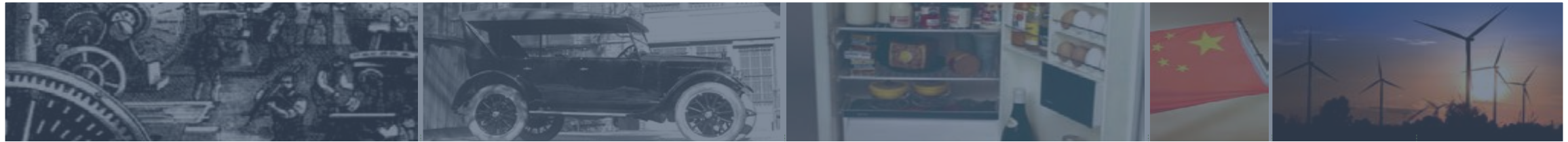
# Background: Global Megatrends in the Energy Sector (1/3)

The peak growth in world fossil energy is estimated to be in 2030, mainly driven by the penetration of new and renewable energy sources into the energy mix

Global primary energy demand

Million terajoules (TJ)

Renewables Fossil fuels



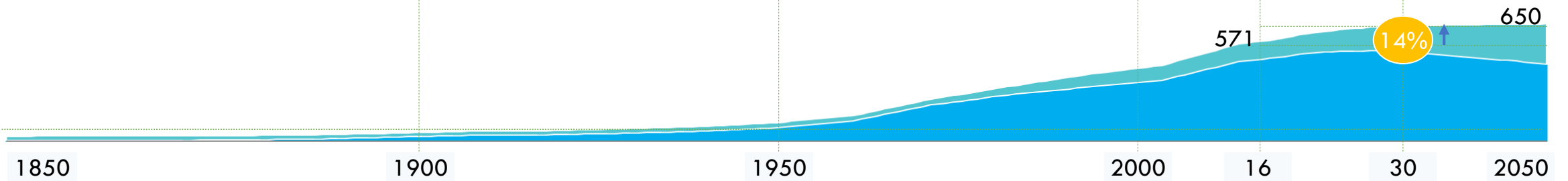
Economic industrialization in the West; most of them still use biomass energy

Expansion of global and local transportation, driven by coal and oil

An unprecedented rise in the standard of living in the West

The rapid growth of industrialization in China

Rapid absorption in Renewable Energy in the energy mix

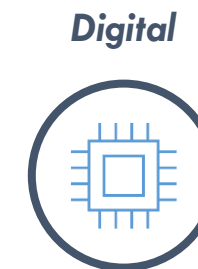


Fossil Fuel Demand CAGR, %



# Background: Global Megatrends in the Energy Sector (2/3)

Megatrends in the Energy Sector also have a major impact on National Energy



**Global**



Global oil demand could peak by 2033;

EV gaining rapid momentum (global annual EV sales exceeding 100 million by 2035)

Chemical sector accounts for more than half of oil demand growth in the next 15 years

Petrochemical Demand shifting to Asia

Gas to grow steadily until 2035; Gas demand will be increasingly met with LNG

Electricity consumption doubles by 2050;

Renewables over 50% of generation by 2035.

Digital transforming entire energy value chain

**Indonesia**



Indonesia oil demand expected to grow but slower

Peak oil in road transport expected in 2033 (E2W may reach ~18mn by 2035)

Oil demand in chemicals to increase 5X by 2035 (from 70 kbpd in 2017 to 350+ kbpd in 2035)

Transition from a net exporter to a net importer by 2028 if new domestic resources cannot be monetized at economic prices

Electricity demand more than double by 2035; Coal continues to be dominant Gas & renewables to increase

Adoption of i4.0 technologies at scale not yet wide spread (~20% vs world average of ~45%), companies still in pilot stage

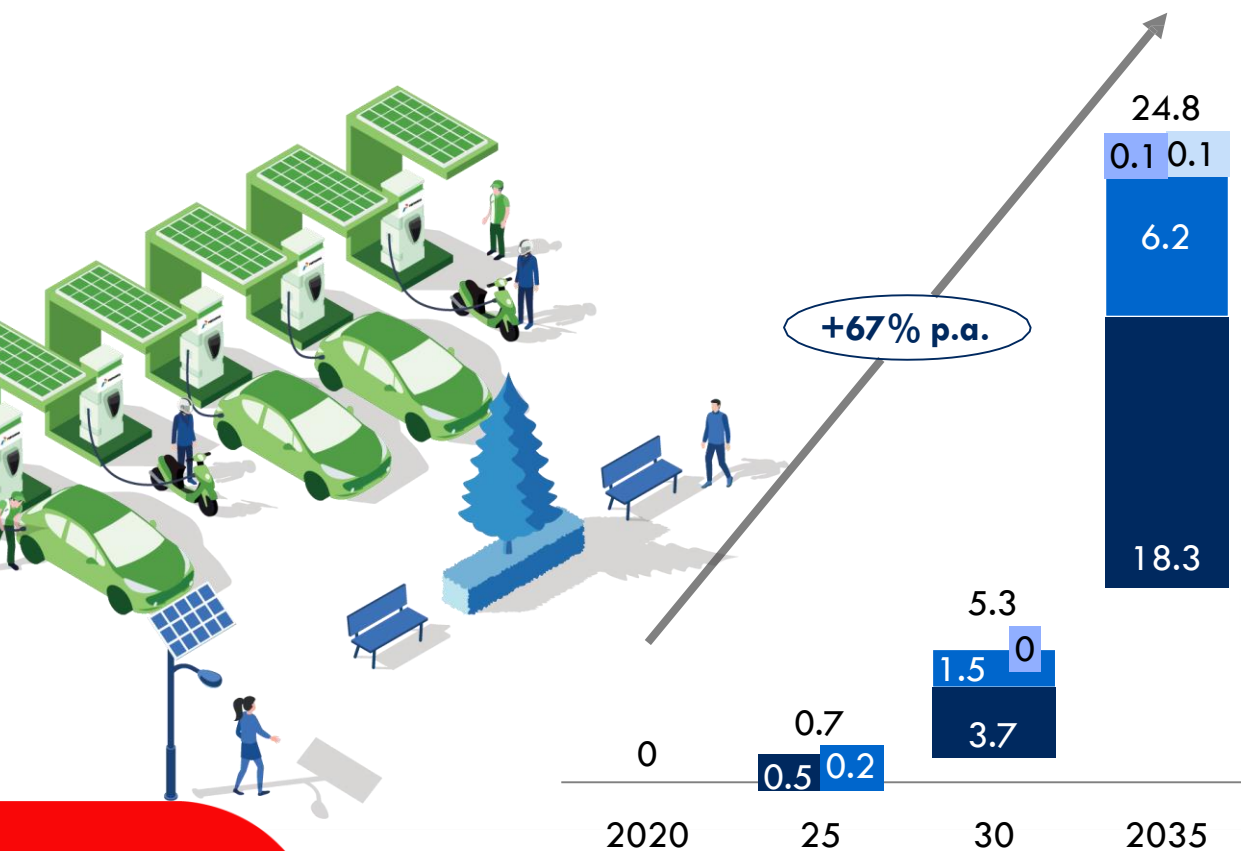


# Background: Global Megatrends in the Energy Sector (3/3)

EV penetration is expected to be driven by E2W, potentially reaching ~18 million Electric 2 Wheels (E2W) by 2035

Trucks Buses Passenger cars 2&3 Wheelers

Indonesia EV vehicle parc<sup>1</sup>, million vehicles



| Parc penetration |      | Sales penetration |      |
|------------------|------|-------------------|------|
| 2025             | 2035 | 2025              | 2035 |
| 0%               | 1%   | 0%                | 14%  |
| 0%               | 4%   | 5%                | 50%  |
| 0%               | 12%  | 4%                | 39%  |
| 1%               | 14%  | 3%                | 58%  |



## Key Takeaways

- The EV market is expected to grow at ~60% p.a, driven by E2W first and then passenger cars
- Almost 25 million EVs will circulate by 2035, including more than 100k city buses and almost 100k urban and regional trucks
- EV will reach more than 10% penetration in parc in buses, 2W and passenger cars by 2035

# Latar Belakang: Strategi Perusahaan Global

Longer term: International oil companies are responding differently to megatrends

## Emergence of new portfolio archetypes

## Majors

## Description



Shale focus alongside key conventional projects

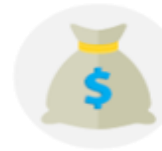


Focus on short-cycle unconventional

Select high-return conventional projects

Investments focused on petroleum

"We're increasingly confident about our Permian growth strategy due to our unique development plans" (**Neil Chapman, ExxonMobil Senior Vice President**)



Streamlined O&G portfolio alongside increased investment in new energy



Streamlined portfolio

Deepwater and LNG focus

Investment in new energy to satisfy investors

"... having a balanced portfolio with advantaged oil and gas, a competitive downstream and a range of low carbon activities... gives us optionality" (**ENI strategy**)



Low carbon focus and diversification into new energy



Strategic shift to an energy company

Upstream portfolio shift to gas

Strong investment in low carbon energy

"The world's carbon budget is finite and running out fast; we need a rapid transition to net zero", (**Bernard Looney, BP CEO**)

"We believe we can be the largest electricity power company in the world in the early 2030s" (**Maarten Wetselaar, Director, Shell Integrated Gas & New Energies**)



Unleashed Domestic Resources and Strengthening Domestic Market



Building capacity in Upstream, Refinery, Petrochemical and Supply Chain Infrastructure

Petrochemical Products Development up to Specialties

Downstreamization Domestic Resources, including Biofuel Dev. (Crude, Gas, CPO, and Coal)

# New & Renewable Energy Development Framework

The program to be run by Subholding Power & NRE



<sup>1</sup> Manufacture Solar Cell, Module, Flexible Thin Film

<sup>2</sup> Diversification from geothermal : direct use of steams for industrial, direct sale of electricity to RE-100 company, CO2 plant, H2 plant, mineral extraction plant (sillicone, lithium, boron)

<sup>3</sup> Cumulative total investment 2020-2026

<sup>4</sup> Cumulative revenue 2020-2026

# Pertamina's Initiative on Research & Technology

Product Development and Innovation in the NRE sector

## Bioenergy:

- **Biocrude**  
Lignocellulosic Bioethanol & Bio Crude Oil, Micro Algae Oil
- **Biodiesel (HVO)**
- **Bio Gasoline**
- **Bio Avtur**
- **Gasohol**  
Mixture of gasoline - methanol with a certain composition
- **Diesel / Fuel Oil Emulsion**  
The result of mixing diesel fuel - water - additives to save energy and reduce exhaust emissions
- **Prototype Biogasoline utk F2 dan F3**

## EV Related:

- **Battery Cell LFP 18650**
- **Battery Cabinet for Energy Storage 14,4 kWh**
- **Battery Energy Storage System (Modular)**
- **Battery Module 4,8 kWh**
- **Fuel Cell**

## DME & Methanol:

- **Dimethyl Ether (DME)**  
Cooking Fuel
- **DME Stove**  
Cooking Equipment
- **Rubber Seal DME Resistance Material**  
Rubber Material for DME Storage
- **Direct Electrolysis CO2 to Methanol**
- **CO2 Conversion to Precipitated Calcium Carbonate (PCC)**
- **Direct Hydrogenation CO2 to Methanol**
- **Methane - CO2 Dry Reforming to Syngas**
- **Catalyst for Syngas to Methanol Production**

## Upstream & EOR:

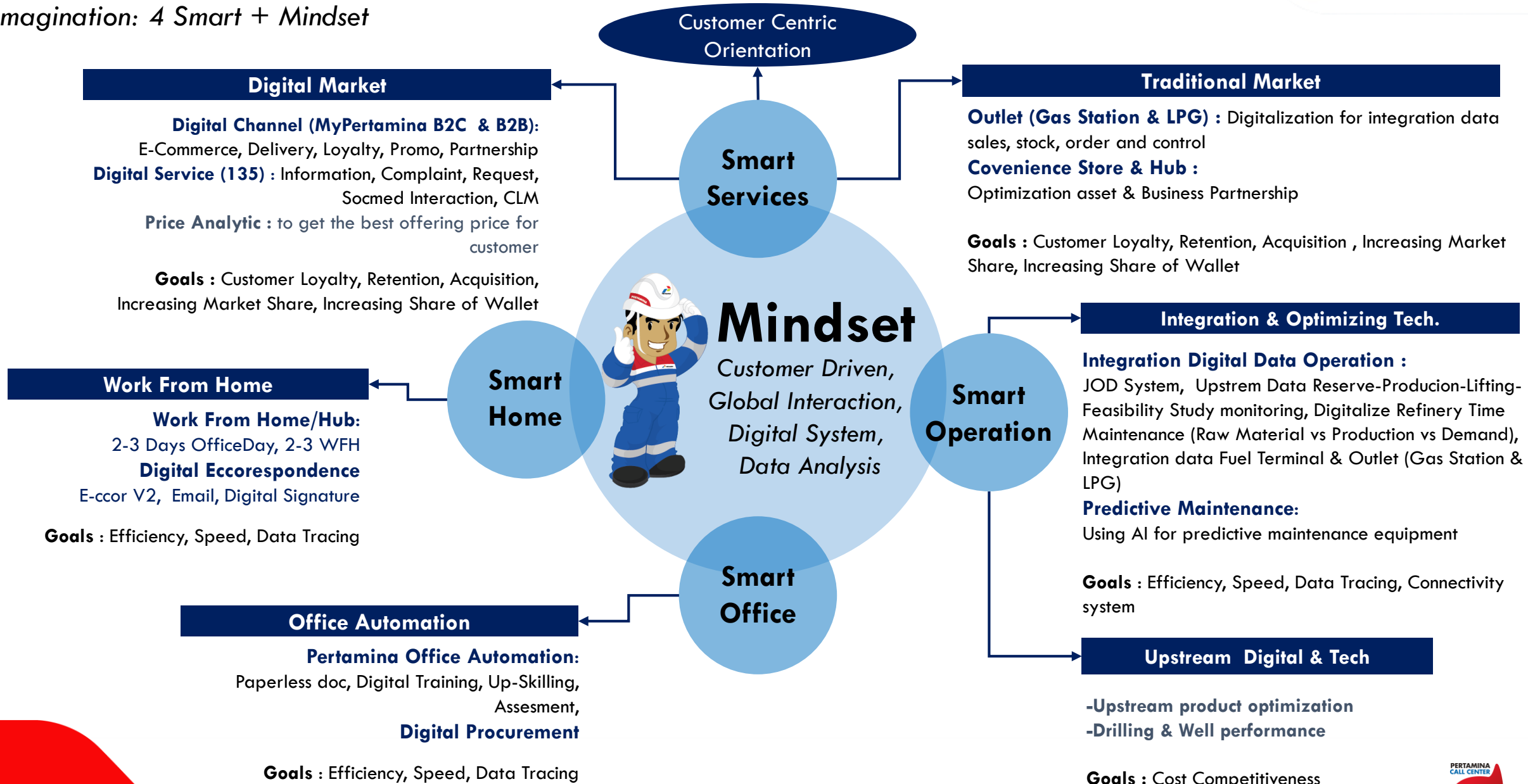
- **PertaEOR**  
EOR Screening study, making EOR Predictive Model, making Economic Analysis for EOR project, Monte Carlo analysis and optimization study
- **PertaSEIS**  
Cloud-based Seismic processing software
- **PertaGASTECH**  
Adsorbent design equipped with a membrane to capture 3 (three) types of Hg, As, and H2S gases which are applied for exploration and monitoring of geothermal fields
- **Sludge Oil Recovery**  
A gasification / pyrolysis reactor with a capacity of 1 ton is used to process sludge oil into fuel. Sludge oil is a refinery residue product that is categorized as B3 waste.
- Binary Cycle Geothermal
- Chemical Fe Removal Agent
- HPHT Drilling & Completion Fluid





# Pertamina Digitalization Framework

Reimagination: 4 Smart + Mindset



# Pertamina Digitalization Initiatives to Focus in 2020

Priority initiatives for 2020



- 6 **Corporate Marketing Effectiveness, Customer experience and pricing optimization**  
Lead generation analytics, improvement of MyPertamina, analytics-based pricing
- 5 **Retail Customer Lifecycle Mgmt. (CLM), Experience & Loyalty Program**  
CLM for retail customers, MyPertamina for monitoring PSO, AI Plate Recognition & Customer Complaints management
- 4 **LPG Digitalization**  
LPG Sales & Distribution Digitalization

**End to End Supply Chain**

- 3 **Vendor Held Stock (VHS) Digitalization**  
Monitoring of Stock at Vendors and optimization of delivery accordingly
- 2 **Integrated Supply Chain from Upstream to Marketing**  
Dynamic Scheduling Automation  
System Primary Distribution
- 1 **Auto Replenishment<sup>1</sup>**  
Integrated Digitalization of SPBU, MS2, Fleet Management & SAP Secondary Distribution

**Digital Refinery 2.0** 7  
Implement Predictive Maintenance at RU Balongan

**Integrated Data Mgmt. & Analytics for Upstream** 8  
Data integration platform, dashboard and analytics for Exploration, Business Development, Production, and data governance program

**Integrated Mega Projects Mgmt. & Optimization** 9  
Single source of truth across Engineering, Procurement & Construction, real-time data update and schedule optimization

**Integrated Asset Lifecycle Management** 10

**Integrated Document Management** 11

**Corporate Functions Digitalization** 12  
Process digitalization supported by analytics-based decision making (e.g., HR cloud, payroll mgmt., proactive reporting in Finance), HC SSC Wave 2, Integrated Talent Mgmt. System (ITMS)

**Ongoing initiatives**

13 **Digital Procurement**  
Strategic procurement, inventory mgmt., digital processes

14 **Corporate Digitalization**  
Corporate dashboard, Joint Operations Dashboard (JOD) and analytics enabled decision making

15 **SPBU Digitalization & TBBM Integration**  
Rollout of digitalization to 5518 gas stations, integration to supply chain systems

16 **Cybersecurity**  
Holistic cybersecurity transformation across the entire value chain

1. To complement Initiative #15  
Source: Pertamina Digital Transformation team  
[www.pertamina.com](http://www.pertamina.com)

# CRS Programs in Pertamina

Scholarship and Volunteering Program to attract Millennials and promote NRE



## CREATING SHARED VALUE (CSV PROGRAM)

Indonesia **Best Corporate Sustainability**  
**5 Desa Mandiri Energi**  
**Peringkat I** Desa Mandiri Energi KBUMN  
**83 Bengkel Mandiri** Enduro  
**192** Siswa Enduro Student Program  
Sertifikasi safetyman & securityman **> 700 warga lokal**

## DISASTER MANAGEMENT

**Nihil insiden** di **15** desa siaga bencana  
**51 anggota aktif** pemuda siap bencana **tersertifikasi**

## BIODIVERSITY PROGRAM

Bekerjasama dengan partner berpengalaman dibawah naungan KLHK (Dirjen Konservasi SDA & Ekosistem)  
Penanaman **> 300 ribu** bibit mangrove & **> 150 ribu** bibit tanaman endemic  
Pelestarian **238 jenis flora dan fauna** ; Penanaman **> 150 ribu** bibit tanaman endemic & Transplantasi **> 2.000** bibit terumbu karang

## SCHOLARSHIP PROGRAM - BEASISWA SOBAT BUMI

**Program Reguler** (Mahasiswa S1 Min. semester 4)  
**Program Khusus** (Atlet, Disabilitas, Kawasan Indonesia Timur).  
**1.668** scholars, **100** athlete scholars & **28** disabilities scholars

## PERTAMINA VILLAGE

**62 Desa Binaan** melibatkan **> 43.000** warga menghasilkan **131** diversifikasi produk & meningkatkan kunjungan wisata tiap tahunnya.  
Penghargaan **Bronze International CSR Excellence Award** :  
**2 Platinum & 3 Gold ISDA Award**.

## EMPLOYEE VOLUNTEERING

Pertamina Energi Negeri tahun ke-4 (PEN 4)  
Pekerja mengajar, berbagi inspirasi & memberikan bantuan pendidikan.  
**> 1.500** Relawan Pekerja Pertamina di **150** Sekolah Umum & Sekolah Khusus (Cancer & Disability)  
**> 3.600** siswa dengan durasi **> 3.600** jam mengajar

## PERTAMINA SEHATI

**> 500** ribu penerima manfaat  
Pemberdayaan **119** Posyandu & Puskesmas  
Penghargaan dari **Bronze PR Asia Award Hongkong** :  
**1 Platinum & 1 Silver Indonesia SDG's Award**

# New & Renewable Energy CSR Program

**KOMPETISI SOBAT BUMI 2020**

Mau berkontribusi untuk inovasi energi baru dan terbarukan?  
Kompetisi Sobat Bumi adalah kompetisi pencarian bibit unggul Indonesia dalam menciptakan inovasi energi bagi keberlangsungan bumi.

**Kategori Teori Sains**  
Kompetisi Olimpiade Sains tingkat Universitas di bidang Matematika, Fisika, Biologi, Kimia

**Kategori Proyek Inovasi EBT**  
Kompetisi terobosan ide dan teknologi seputar Energi Baru & Terbarukan (EBT), yang dapat diaplikasikan untuk memenuhi kebutuhan energi di daerah 3T (Terdepan, Terluar & Tertinggal)

Periode Kompetisi: 1 Juli - 9 Des 2020

Total hadiah **900 JUTA++ RUPIAH**

Daftarkan dirimu sekarang!  
Informasi lebih lanjut kunjungi: [www.sobatbumi.id](http://www.sobatbumi.id)

[f SobatBumiIndonesia](https://www.facebook.com/SobatBumiIndonesia) [@sobatbumi\\_id](https://www.instagram.com/sobatbumi_id)

[www.pertamina.com](http://www.pertamina.com) [in](https://www.linkedin.com/company/pertamina) [f](https://www.facebook.com/pertamina) [@pertamina](https://www.instagram.com/pertamina) [@pertamina](https://www.youtube.com/channel/UC8v31111111111111111111)

**135**

Science Theory Competition



People

Menghasilkan calon SDM unggul yang mampu menciptakan inovasi energi untuk keberlangsungan bumi

EBT Innovation Project Competition



Planet



Profit

Menciptakan inovasi energi yang dapat dikembangkan bersama dengan Pertamina, serta mampu menyelesaikan isu sosial seputar kelangkaan energi di daerah terpencil, pelosok dan/atau terisolir lainnya, yang dapat memberikan dampak positif kepada masyarakat serta lingkungan.



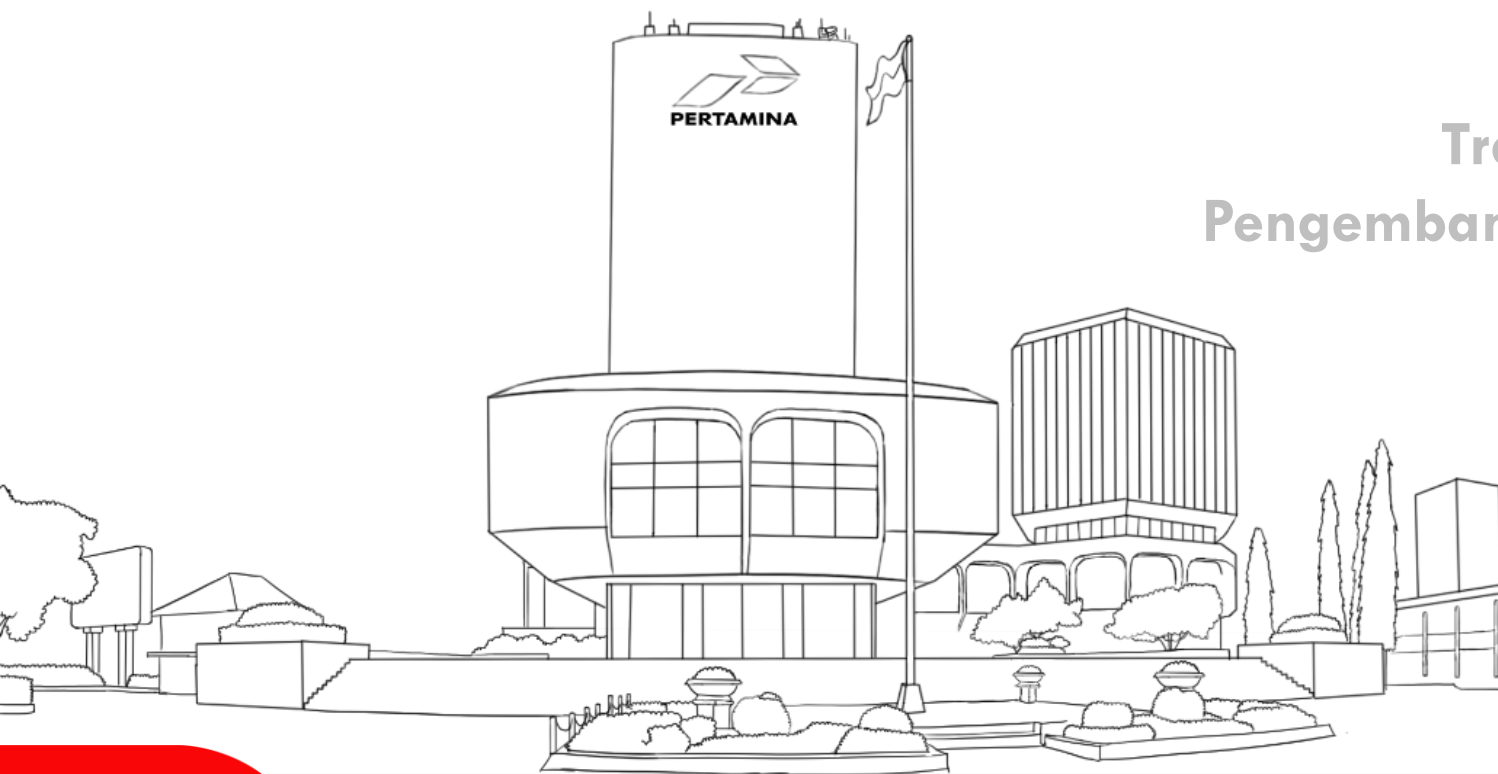
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# Millennials?



## Millennials Seek

1. Purpose,
2. Invent new ways of doing business and solving problems
3. Create flexibility career
4. Collaborate openly
5. Innovation at work

### Deloitte Milenials Survey, 2016

|   |   |   |
|---|---|---|
| <p>“Rekan satu tim mereka adalah orang terpenting di tempat kerja”</p>                | <p>“80% ingin memberikan penilaian kinerja kepada atasan”</p> | <p>“60% berpikir bahwa jika telah menjalankan jabatannya selama tujuh (7) bulan maka mereka dapat diartikan loyal”</p>  |
| <p>“Mengharapkan umpan balik (feedback) secara mingguan dan perkembangan tahunan”</p> | <p>“2/3 ingin menjadi “kreatif” pada pekerjaannya”</p>        | <ul style="list-style-type: none"> <li>• Rekan satu tim (influencer, interactive, trust)</li> <li>• Feedback rutin</li> <li>• Equal treatment</li> <li>• Kreatif – kebebasan</li> </ul> |

Deloitte, 2017



Catatan: Sumber data diperoleh dari *No, Millennials will NOT be 75% of the Workforce in 2025 (or ever)!*, Anita Lettink, 2019

# Millennial Demographic

## Millennial in Indonesia

### >63,5 Million



#### Fact in Numbers:

1. Indonesia experiences a demographic bonus until 2045
2. The population aged 21-36 years is 63.5 million people (about 35% of the productive age 15-64 years)

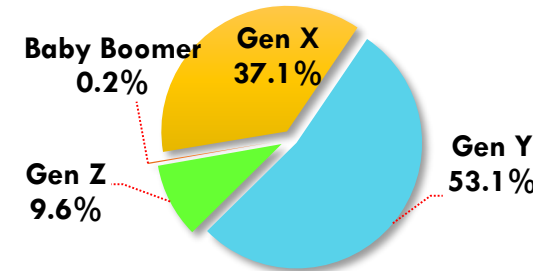
Ref:

IDN Research Institute : Indonesia Millennials Report

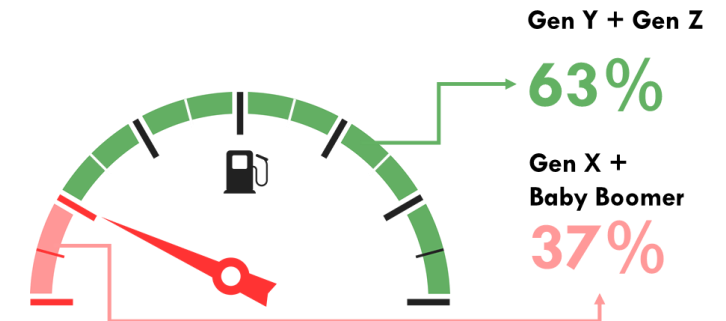
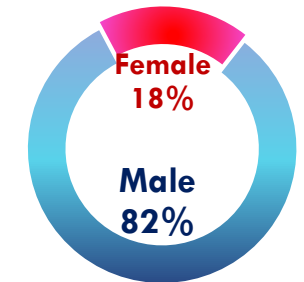
## Millennial in Pertamina

Gen Y and Gen Z workers are scattered throughout Pertamina's Business Areas in Indonesia

#### Generation Demographic



#### Gender Demographic



1. Total employees of Pertamina Group: 34,065 people
2. Total Gen Y and Gen Z Workers: 21,366 people
3. Gen Y: born 1 Jan 1980 - 31 Dec 1994 (ref.McKinsey & Co.)
4. Gen Z: born 1 Jan 1995 - 31 Dec 2010 (ref.McKinsey & Co.)
5. Employee Demographic Data based on Pertamina SAP data Group as of July 1, 2020

**>21K**  
Total Pertamina  
Gen Y + Gen Z  
Workers

# Pertamina Ecosystem



## Profit

**The energy of great economic growth** can continue to strengthen the robustness of Pertamina's financial capital and reflect the element of "profit".

## Planet

**Communities and the environment** are a great energy for sustainable growth to continue to maintain the robustness of Pertamina's natural capital and reflect the "planetary" element

## People

Employees and students who are **competent, passionate and have high entrepreneurial spirit** become extraordinary energy for the growth of Indonesian people so that Pertamina's human capital can be more robust and reflect the "people" element

# Millenials And The Next Practices

Surpassing Industry Leaders and Achieving Pertamina's Global Energy Champion aspiration can be achieved by executing Next Practices Strategy

## Best Practices

Well Documented

Imitation

Lagging

Help Organization keep up with competitors

VS

## Next Practices

Not Widely Known

Innovation

Leading

Help Organization **surpass** the competitors

### Data Analytics is Key

1. New Way of Learning
2. New Way of Decision Making
3. Business Model Innovation

# Millennials And Key Competencies

Data Analytics and Digital Savvy are the keys to achieve doubled revenue target within 5 years

## A. What need to develop and improve

### 1. Leadership Behavior

- ✓ Digital Savvy
- ✓ Agility
- ✓ Learning Agility
- ✓ Innovation & Creativity
- ✓ Collaboration

### 2. Strengthen Technical Competencies

- ✓ Data Analytics
- ✓ People Analytics
- ✓ Digital Risk Mitigation
- ✓ Business Analysis and forecasting

## B. How to measure the competencies

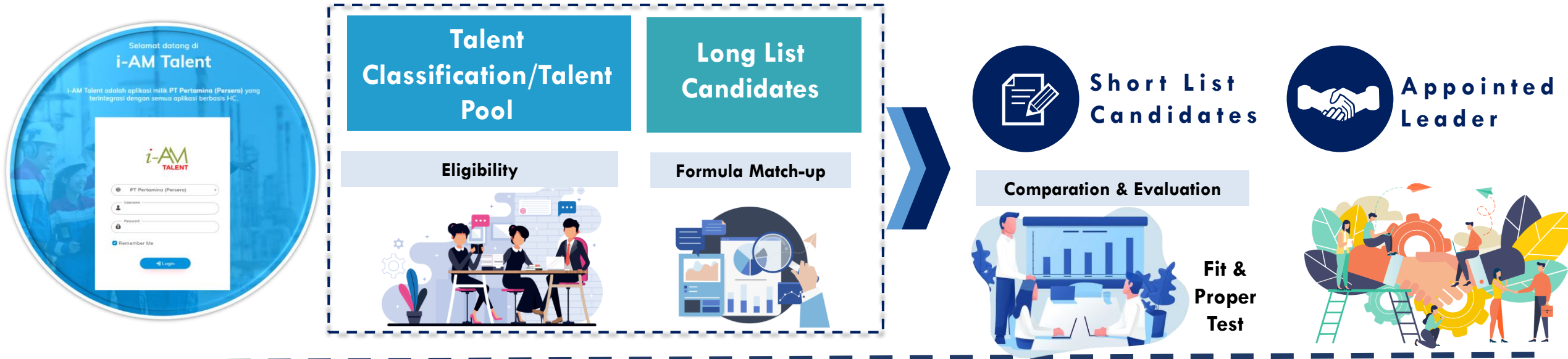
1. Online/virtual Technical Competencies Assesment
2. Online/virtual Leadership Competencies Assesment Center





# Career Channel Creation & Millennials

## I-Am Talent Succession Planning & Career Aspiration



## Internal Job Posting for Strategic Positions



Open for all employee levels

Transparent Processes

Promotion & Consequences

# How To Develop Millennials in Pertamina?

## Pertamina Talent Development Strategy

### Talent Management System Development



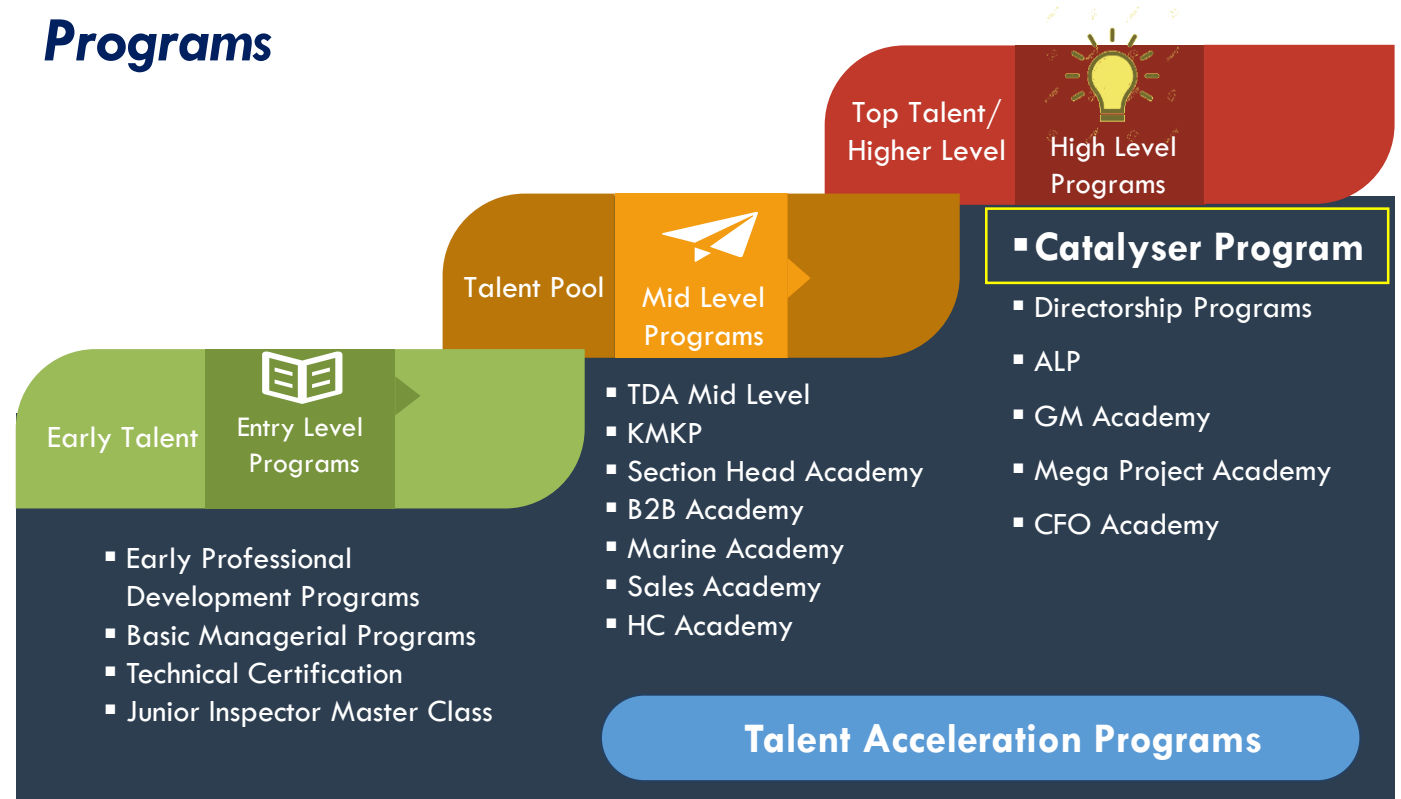
**I-am Talent Succession Planning**



**I-am Talent Internal Job Posting**



### Talent Development Programs



# Creating Millennial Leaders

Pertamina Board of Director & Senior Leaders are strongly committed in accelerating 480 leaders within 5 years with Catalyser Program



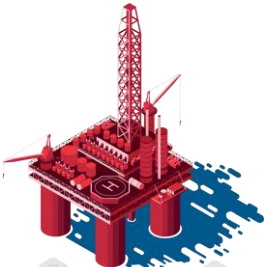
## National Impact

Taking key positions in government & energy policy.



## Strategic & Organizational Impact

1. Taking key roles in international projects & in strategic functions.
2. Significant Promotion rate



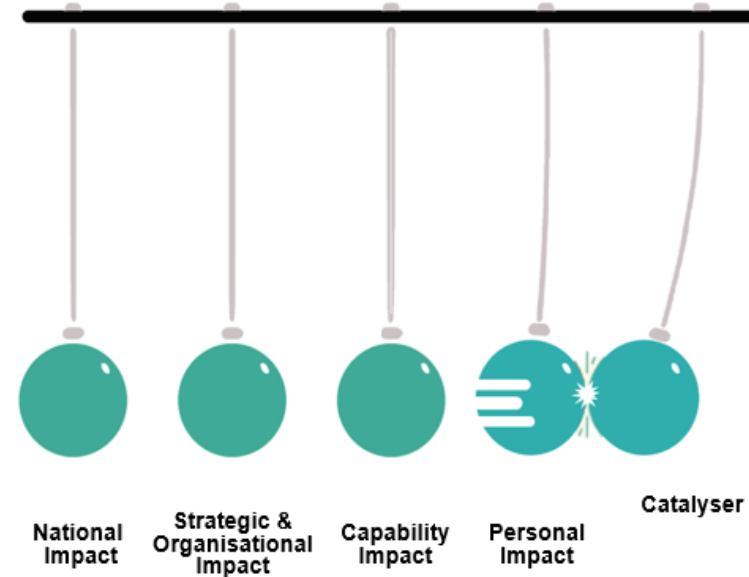
## Capability Impact

Most of the leadership capabilities being improved along the program.



## Personal Impact

Possible for mobility & promotion based on aspirations.



|  |  |   |
|--|--|---|
| <h1>77 %</h1> <p>Has received promotions since beginning of Catalyser, 13 of them were promoted from Manager to VP<br/>(Promotion levels VP and SVP)</p> | <h1>66 %</h1> <p>Changed responsibilities, functions, business unit, geography since beginning of Catalyser.<br/>(Organisational mobility)</p> | <h1>8</h1> <p>Participants have been promoted to Director in Subholding/Subsidiary/Affiliation<br/>(Promotion level Director)</p> |
|--|--|---|

“ Strategic & Organizational Impact of Catalyser Program ”



# How to Create Millennials Friendly Work Cultures

## DIGITAL CULTURE

- 1 **Focus on a Few Critical Behaviour Changes**  
Agile, Data Driven, Innovative, Collaborative
- 2 **Align With BUMN Values – AKHLAK**  
Kompeten & Adaptif



E-sport Competition



Mobile Learning

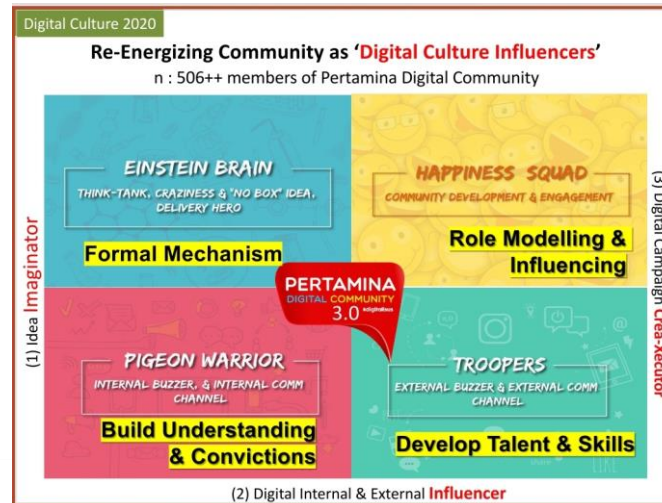


Digital Expo  
Paper Competition  
Hackathon

## VIRTUAL COLLABORATION TOOLS



## DIGITAL COMMUNITY



# Direksi Milenial di Anak Perusahaan Pertamina

Pertamina mengimplementasikan nilai Kolaborasi & Kompeten sebagai *core values* AKHLAK dalam bentuk memberikan kesempatan karier yang lebih luas kepada seluruh pekerja Pertamina yang memiliki *passion* dan kompetensi unggul



**Yoki Firnandi**  
Direktur Optimisasi  
Produk  
PT Kilang Pertamina  
Internasional

**Usia**  
40 Tahun  
**Pendidikan Terakhir**  
S2 MBA Prasetya  
Mulya



**Mars Ega  
Legowo Putra**  
Direktur Perencanaan  
dan Pengembangan  
Bisnis  
PT Pertamina Patra  
Niaga

**Usia**  
41 Tahun  
**Pendidikan Terakhir**  
S1 Manajemen  
Unpad



**Isabella  
Hutahaean**  
Direktur SDM &  
Penunjang Bisnis  
PT Pertamina Patra  
Niaga

**Usia**  
44 Tahun  
**Pendidikan Terakhir**  
S1 Teknik Kimia ITB



**Fitri Azwar**  
Direktur Keuangan  
PT Pertamina  
Training & Consulting

**Usia**  
43 Tahun  
**Pendidikan Terakhir**  
S2 MM UI



**Iin Febrin**  
Direktur Utama  
PT Pertamina Retail

**Usia**  
42 Tahun  
**Pendidikan Terakhir**  
S2 MM Prasetya  
Mulya



**Wisnu Medan  
Santoso**  
Direktur Perencanaan  
Bisnis  
PT Pertamina  
International  
Shipping

**Usia**  
41 Tahun  
**Pendidikan Terakhir**  
S2-Applied Earth  
Sciences and  
Petroleum Colorado  
School of Mines/USA



**Arief Kurnia  
Risdianto**  
Direktur Operasi  
PT Pertamina  
International  
Shipping

**Usia**  
41 Tahun  
**Pendidikan Terakhir**  
S2 Teknologi  
Kelautan - World  
Maritime University



**I Putu Puja  
Astawa**  
Direktur Armada  
PT Pertamina  
International  
Shipping

**Usia**  
43 Tahun  
**Pendidikan Terakhir**  
S1 Teknik  
Perkapalan – ITSN  
Surabaya



# AKHLAK Supported by PERWIRA Millennial Programs



|  |   |
|--|---|
| <p><b>AMANAH</b><br/>Memegang teguh kepercayaan yang diberikan</p>                                     | A |
| <p><b>KOMPETEN</b><br/>Terus belajar dan mengembangkan kapabilitas</p>                                 | K |
| <p><b>HARMONIS</b><br/>Saling peduli dan menghargai perbedaan</p>                                      | H |
| <p><b>LOYAL</b><br/>Berdedikasi dan mengutamakan kepentingan bangsa &amp; negara</p>                   | L |
| <p><b>ADAPTIF</b><br/>Terus berinovasi dan antusias dalam mengerjakan ataupun menghadapi perubahan</p> | A |
| <p><b>KOLABORATIF</b><br/>Membangun kerjasama yang sinergis</p>  | K |

- Leader's Up Close & Personal Event
- Duta Pertamina
  
- New Internal Job Posting
- Continuous Improvement Programs
  
- Bazaar Energi Negeri
- Employee Journalism
  
- Nationalism Video Challenge
- PERWIRA digital Channel
  
- Virtual Digital Expo
- Virtual Employee Walkthrough
  
- Pertamina Energi Negeri
- eSport Competition



## Work Life Balance

**Fresh Fit and Fun Friday**

Ayoo ikuti...  
Fresh Fit and Fun Friday Senam Yoga melalui Video.

ikuti pula Tips Dokter Ahli Gizi dengan tema "Cegah Stress dan Penuaan dalam masa pandemi dengan asupan nutrisi yang tepat" pada tautan yang sama.

**KLIK DISINI**

#BangkitkanSemangatBaru

DIREKTORAT SDM

**BAPORS PHE 2020**

Detail informasi kegiatan dan *Person In Charge* dari masing-masing cabang BAPORS, silahkan klik LINK berikut ini

<http://phkpsp13.pertamina.com/corporate/sdm/bapors/Pages/Default.aspx>

Ask "HR&GA" CONTACT CENTER, Phone ext. 8888 or e-mail : [phe.contact.hrga@pertamina.com](mailto:phe.contact.hrga@pertamina.com)

## Social Involvement

**VOLUNTARY DAYS 2019**

**APA SIH Pertamina Energi Negeri 4**

Hai sobat! Pertamina Energi Negeri (PEN) sudah memasuki tahun ke-4 lho. Apa sih PEN itu? PEN adalah kegiatan kerelawanan pekerja Pertamina untuk turun langsung ke masyarakat khususnya anak-anak sekolah dasar. Selain mengajar dan mengenalkan Pertamina, para relawan juga membagikan inspirasi dan semangat untuk anak-anak. PEN merupakan wujud kontribusi Pertamina dalam mewujudkan pendidikan Indonesia. Acara luar biasa ini merupakan salah satu rangkaian acara Voluntary Days 2019 yang dilaksanakan di 18 kota dengan jumlah partisipasi sekolah sebanyak 50 sekolah.

Keren kan?

#PertaminaVoluntaryDays  
#PertaminaEnergiNegeri4  
#PertaminaEmployeeJournalism  
#EnergiUntukMaju

**GRAFIK PENINGKATAN REALAWAN YANG BERGABUNG**

|                    |     |                    |      |
|--------------------|-----|--------------------|------|
| 2 Relawan Pengajar | 563 | 2 Relawan Pengajar | 537  |
| 0 Relawan Panitia  | 201 | 0 Relawan Panitia  | 324  |
| 1 Total Relawan    | 764 | 1 Total Relawan    | 861  |
| 2 Relawan Pengajar | 687 | 2 Relawan Pengajar | 883  |
| 0 Relawan Panitia  | 233 | 0 Relawan Panitia  | 272  |
| 1 Total Relawan    | 920 | 1 Total Relawan    | 1155 |

Terdapat kenaikan minat pekerja untuk menjadi relawan pengajar pada PEN 4 2019, yaitu sebesar 64,43% (360 orang) di bandingkan dengan pada pelaksanaan PEN tahun 2018

**PERTAMINA ENERGI NEGERI**



Badan Pembinaan Olah Raga dan Seni  
**BAPORS**

# Terima Kasih



*Ketulusan untuk Melayani*



# Transformasi PLN & Harapan pada Milenial

Jakarta, 12 Agustus 2020

#PowerBeyondGeneration

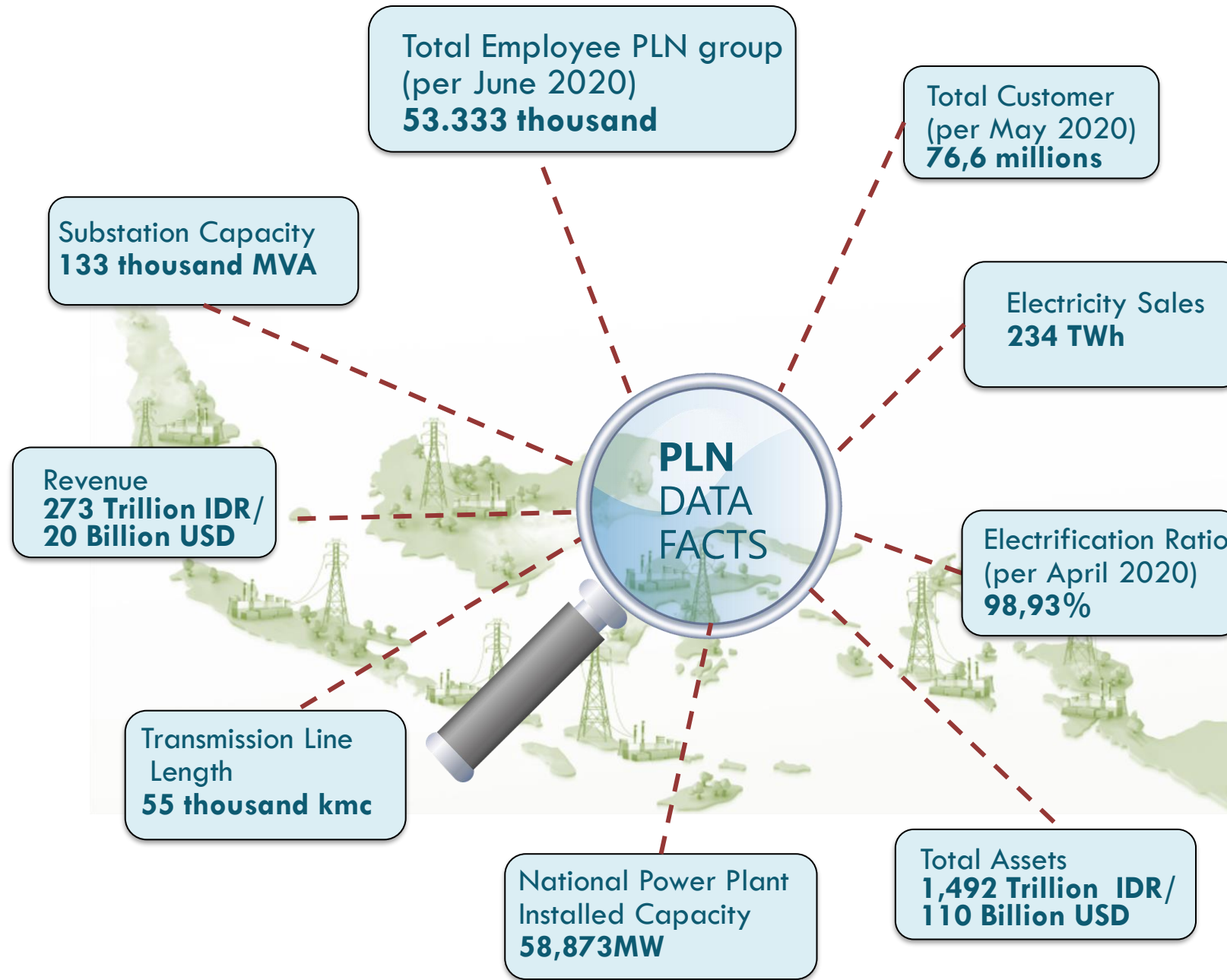
*Presented by:*

**Zulkifli Zaini**

Direktur Utama PT PLN (Persero)









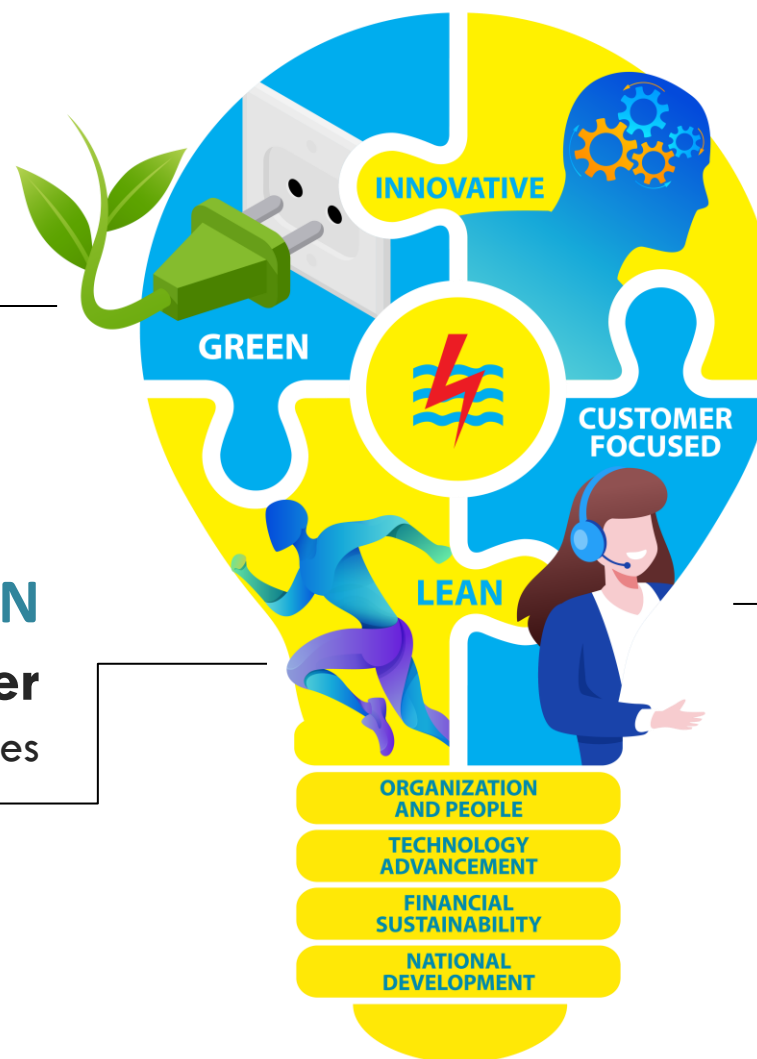


# #TransformasiPLN

Electricity Champion of **South-East Asia**  
and **#1 customer choice**  
for energy solutions

**GREEN**  
**Leading Indonesia's energy transition**  
through rapid and efficient scale-up of renewables

**LEAN**  
**Lean, reliable and least cost provider**  
of electricity to home, business and industries



**INNOVATIVE**  
**Stimulating growth**  
through innovative business models and services

**CUSTOMER FOCUSED**  
**Delighting customers**  
through world class quality and services

**“Perubahan itu mutlak!**  
Jika kita tidak berubah, maka pelanggan akan meninggalkan kita”

PLN memiliki visi untuk menjadi **perusahaan listrik terbaik di Asia Tenggara** dan menjadi **pilihan utama para pelanggan**

**PLN akan bertransformasi** dari *supply driven organization* menjadi *demand driven organization*

# PLN memiliki kekuatan utama yang dapat dimanfaatkan dan tantangan yang perlu diatasi

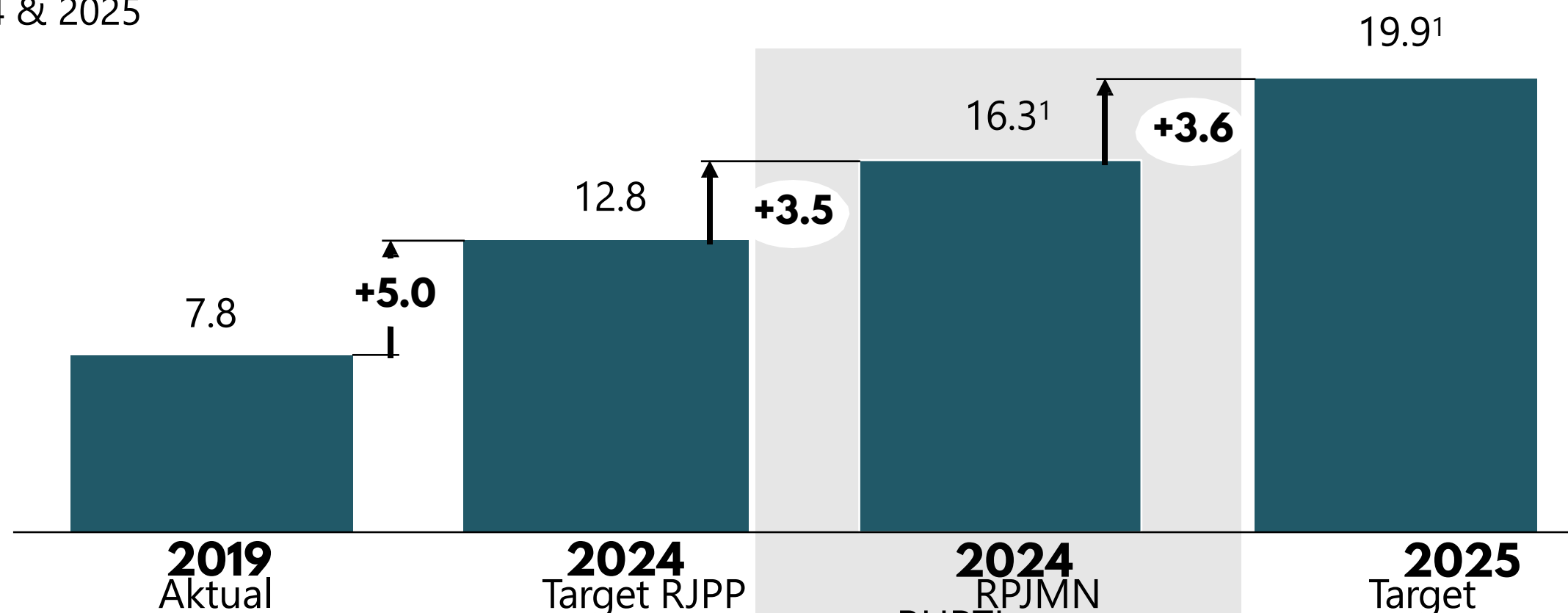


|                                      |   |  |
|--------------------------------------|---|--|
| <b>Keamanan dan kualitas pasokan</b> | <ul style="list-style-type: none"> <li>⊕ Demand listrik yang meningkat dan sumber daya alam yang cukup besar untuk dimanfaatkan</li> <li>⊕ Basis pelanggan terbesar di Indonesia, dengan jumlah pelanggan sebanyak 76,6 juta</li> </ul>                     | <ul style="list-style-type: none"> <li>⊖ Kesenjangan dalam kinerja sistem (kualitas pasokan, biaya, dll) dan geografi yang kompleks</li> <li>⊖ Pengetahuan terbatas tentang pelanggan dan pemahaman tentang prioritas mereka</li> </ul>  |
| <b>Keberlanjutan finansial</b>       | <ul style="list-style-type: none"> <li>⊕ Basis aset besar – salah satu perusahaan terbesar di dunia dan perusahaan terbesar di Asia Tenggara</li> <li>⊕ Dukungan dari para pemangku kepentingan, karena peran PSO PLN</li> </ul>                            | <ul style="list-style-type: none"> <li>⊖ Kesehatan keuangan yang lemah dan kurangnya kontrol biaya, akuntabilitas, serta budaya risiko</li> <li>⊖ Peran yang tidak jelas antara pusat dan wilayah, tata kelola yang kompleks PLN Group (mis: 56 unit Iduk PLN, 11 anak perusahaan dan 35 cucu perusahaan)</li> </ul>   |
| <b>Peran dan organisasi PLN</b>      | <ul style="list-style-type: none"> <li>⊕ Peran strategis di Indonesia, sebagai satu-satunya pengelola ketenagalistrikan</li> </ul>  | <ul style="list-style-type: none"> <li>⊖ Struktur tarif yang menyebabkan peningkatan subsidi dan kompensasi</li> </ul>   |
| <b>SDM dan talenta</b>               | <ul style="list-style-type: none"> <li>⊕ Tenaga kerja yang bersemangat dan kompeten secara teknis, dengan budaya melayani pelanggan</li> <li>⊕ Tenaga kerja muda dengan 70% milenial – sangat terlatih pada keterampilan baru, khususnya digital</li> </ul> | <ul style="list-style-type: none"> <li>⊖ Kesenjangan produktivitas SDM dan kurangnya digitalisasi proses bisnis sehingga berdampak pada efisiensi dan eksekusi</li> <li>⊖ Staf tidak memiliki kompetensi keuangan dan bisnis serta kesiapan untuk 3D (Desentralisasi, Dekarbonisasi, Digitalisasi)</li> <li>⊖ Tenaga kerja berpengalaman mulai pensiun sehingga mengakibatkan erosi keahlian teknis</li> </ul> |
|                                      | <h2>#KEKUATAN</h2>  | <h2>#TANTANGAN</h2>  |



# Target EBT dalam RJPP PLN sebesar **12,8 GW** pada Tahun **2024**, VS Mandat RJPMN **16,3 GW**

**Kapasitas terpasang EBT**  
GW: 2019, 2024 & 2025



Target EBT PLN saat ini (dalam skenario rendah RJPP 2020–2024) adalah **12,8 GW** pada **2024 (+5,0GW vs saat ini)**

Untuk melaksanakan mandat nasional **membutuhkan inisiatif untuk penambahan 3,5 GW pada tahun 2024 (target RPJMN) dan 7,1 GW** pada tahun 2025 (target RUPTL)

**Proporsi EBT dalam produksi, %**  
**Emisi CO<sub>2</sub>, jt**  
tons/tahun  
**Emisi CO<sub>2</sub>, kg/kWh**

| 2019 Aktual | 2024 Target RJPP | 2024 RPJMN RUPTL | 2025 Target |
|-------------|------------------|------------------|-------------|
| 11%         | 16%              | 20%              | 23%         |
| 177         | 230              | 219              | 220         |
| 0.65        | 0.64             | 0.62             | 0.59        |

1. Implementasi RJPP 2020-2024
2. Meluncurkan "Greenboosters"
3. Meluncurkan EBT skala besar

PLN telah mengidentifikasi **tiga rangkaian inisiatif** untuk mencapai aspirasi EBT: Implementasi RJPP, meluncurkan *Green Booster* dan membangun EBT skala besar

1. Menggunakan 46% CF EBT dan RJPP skenario rendah sebagai total permintaan pasar untuk 2024 (355TWh) dan 2025 (374TWh)



# #GreenBoosterProgram

Process



Kayu lamtoro dikeringkan



Batang Kayu dihancurkan menjadi serpihan (wood chips)



Wood chips dicampur dengan batu bara



Campuran Wood chips dan batu bara dibakar dalam boiler

“Keunggulan dari inovasi **CoFiring** ini adalah **pengurangan penggunaan fossil fuel power plant** menjadi **green power plant** untuk mendukung **target bauran EBT 23% di tahun 2025** tanpa diperlukan investasi pembangkit EBT baru yang memerlukan CAPEX cukup besar.”



## CoFiring Biomassa

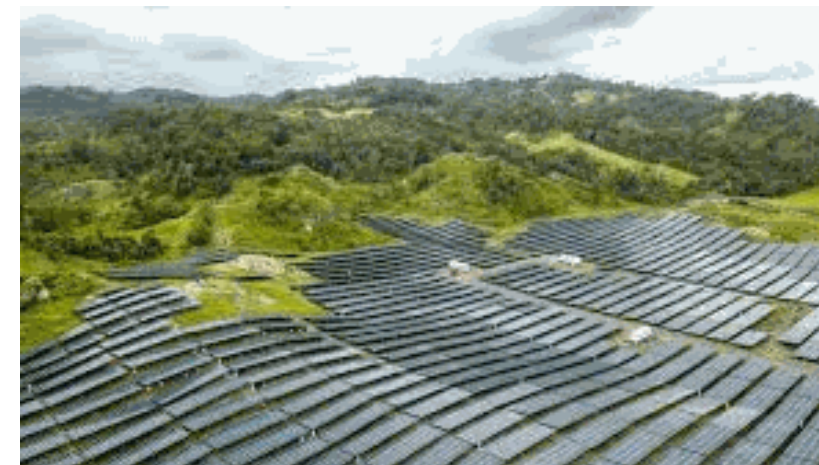
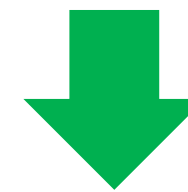
#PowerBeyondGeneration

# Dediselisasi



“Program dediselisasi dilaksanakan PLN dalam rangka pengalihan penggunaan bahan bakar minyak ke sumber energi EBT. Sebagai salah satu **komitmen** PLN dalam **mendorong peningkatan EBT menjadi 23% di tahun 2025** dapat **tercapai.**”

“Lahan-lahan bekas tambang yang **tidak terpakai** masih dapat dimanfaatkan sebagai lokasi pengembangan **PLTS.**”



## PLTS lahan ex-tambang



# Pemanfaatan Waduk Multiguna



”Salah satu kerjasama yang dirintis dengan PUPR melalui pemanfaatan **waduk/bendungan yang ada dan bersifat multiguna** selain sebagai irigasi dapat dimanfaatkan untuk **pembangkit listrik.**”



**#LargeScaleProgram**

**Suplai**


“**PLN** mendukung peluang investasi di Indonesia dengan **menyediakan sumber energi listrik dari pembangkit EBT** untuk **industri dengan skema *Renewable Energy Based Industry Development (REBID)***.”

**PLTA - REBID**

# PLTS Skala Besar



“**PLN** bersama anak perusahaannya, yaitu PT PJB, mengawal **pengembangan PLTS Apung terbesar di Asia Tenggara dan beberapa PLTS skala besar lainnya.**”



“**Potensi panas bumi di Indonesia merupakan salah satu yang terbesar di dunia.**”

**PLTP**



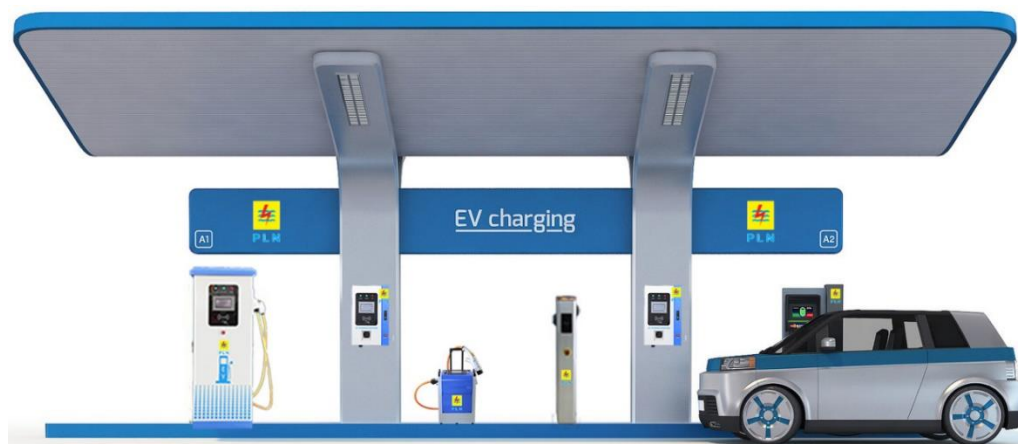
# #PLNCleanEnergy



“SPKLU merupakan bagian dari implementasi kelengkapan infrastruktur bagi kendaraan bermotor listrik berbasis baterai, sesuai dengan Peraturan Presiden No. 55 Tahun 2019.”



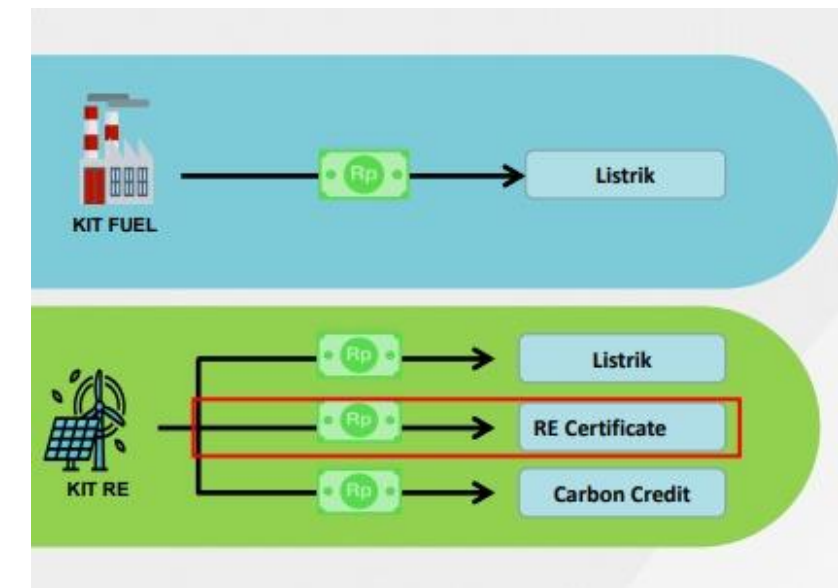
## SPKLU

 (Stasiun Pengisian Kendaraan Listrik Umum)

“Di akhir Oktober 2019, PLN telah meresmikan Stasiun Pengisian Kendaraan Listrik Umum (SPKLU) secara bersamaan di 4 kota yaitu Tangerang, Bali Selatan, Jakarta, dan Bandung.”



“PLN berkomitmen menyediakan sejumlah SPKLU, yang disediakan secara mandiri oleh PLN, ataupun melalui kerja sama dengan pihak swasta.”



“Produk layanan yang dihadirkan PLN bagi Pelanggan/Calon Pelanggan yang menginginkan penggunaan *renewable energy* melalui kepemilikan REC sebagai bagian dalam komitmennya turut serta dalam menjaga pelestarian lingkungan”



## REC

 (Renewable Energy Certificate) Services





## Environment

## Culture

# Technological



**The 3 Elements of Employee Experience**



# Environment



**20 Transformation Officer Agents\***

**20 Transformation Officer Communicators\***

**\*) Selected and Qualified Millenials in PLN**



## Physical Environment



# #MillennialsKnowledgePlatform



Learning

**ignition #1**  
PLN GROUP  
Ignitors Collaboration

Young Professionals Platform for Collaboration, Speak Up and Inspiration

## ELECTRICITY IN THE FUTURE

Wednesday, 8 July 2020 | 15.30 - 17.00 Jakarta time

LIVE-STREAMING YouTube ZOOM  
Energy Academy Indonesia Free registration & e-certificate available

[tiny.cc/IGNITION\\_1](https://tiny.cc/IGNITION_1)

**Opening**  
**Daru Tri Tjahjono**  
EVP Talent Development, PT PLN (Persero)

**Speaker**  
**Imam T. Sulisty, S.T., M.Sc.**  
Alumni Pegawai Tugas Belajar Tahun 2019 - Univ. of Aberdeen  
Ass. Analyst of Business Development, PT Indonesia Power  
"Floating Photovoltaic"

**Panelist**  
**Kurnia Rumdhy**  
VP Strategic Business Development  
PT PLN (Persero)

**Speaker**  
**Teguh Kurniawan, S.T., M.T.**  
Alumni Pegawai Tugas Belajar Tahun 2020 - ITB Batch 8  
& Univ. of Auckland (game Research)  
"Future Electric Vehicle"

**Host**  
**Fuji D. Larasati**  
Millennials of PLN Group  
Ass. Analyst Pengembangan SDM, PT PLN (Persero)  
UID Jawa Timur

**Panelist**  
**Agung Siswanto**  
VP Expert Development & PLN Group  
PT PLN (Persero)

**Host**  
**Risky O. Putri**  
Millennials of PLN Group  
Ass. Analyst Pengembangan SDM, PT PLN (Persero)  
UID Jawa Timur

**Speaker**  
**Widhiyaksa Saveedra, S.T., M.Eng**  
Alumnus of Univ. of Auckland  
AE Perusahaan Pembangkit UJ, PLTGU Tanjung Batu, UIK Kalimantan  
"Geothermal Energy Power Plant at a Glance"

**ignition #2**  
PLN GROUP  
Ignitors Collaboration

Young Professionals Platform for Collaboration, Speak Up and Inspiration

## FAST & FURIOUS POWER TRANSMISSION

Wednesday, 22 July 2020 | 15.30 - 17.00 Jakarta time

LIVE-STREAMING YouTube ZOOM  
Energy Academy Indonesia Free registration & e-certificate provided

[tiny.cc/IGNITION\\_2](https://tiny.cc/IGNITION_2)

**Speaker**  
**Afrizal Saputra**  
Millennials of PLN Group  
JT PDKB JAR TT/ET  
Angkatan HCMS 2014  
UIP3BS UPT Banda Aceh  
"PDKB in Daily"

**Speaker**  
**Agustriadi, S.T., M.T.**  
Alumni Pegawai Tugas Belajar PLN - ITB Batch 7  
Joint Research G2ELab Grenoble INP France  
JE Strategi Operasi Sistem UIP P3BS  
"Lesson Learned from Power System Blackouts in the World"

**Speaker**  
**Eko Prasetyo, S.T., M.Sc.**  
Alumni Pegawai Tugas Belajar PLN - LPDP  
Lulusan dari University of Manchester, UK  
AE Assessment Proteksi Sub Bid Har UIT JBT  
"The Rise of Digital Substation Era in Indonesia"

**Opening**  
**Daru Tri Tjahjono**  
EVP Talent Development  
PT PLN (Persero)

**Panelist**  
**Abdul Salam Nganro**  
SRM Transmisi 1 UIP3B Sumatera  
PT PLN (Persero)

**Host**  
**Ida A.P. Kristiantari**  
Millennials of PLN Group  
AS Treasury Planning & Strategy  
PLN Kantor Pusat

**Host**  
**Risky O. Putri**  
Millennials of PLN Group  
Ass. Analyst Pengembangan SDM  
PT PLN (Persero)  
UID Jawa Timur

**Panelist**  
**Handy Wihartady**  
VP Electricity System Planning 2  
PT PLN (Persero)

**ignition #3**  
PLN GROUP  
Ignitors Collaboration

Young Professionals Platform for Collaboration, Speak Up and Inspiration

## NOW OR NEVER ASSET MANAGEMENT & DIGITAL DISTRIBUTION

Wednesday, August 12, 2020 | 15.30 - 17.00 Jakarta time

LIVE-STREAMING YouTube ZOOM  
Energy Academy Indonesia Free registration & e-certificate provided

[tiny.cc/IGNITION\\_3](https://tiny.cc/IGNITION_3)

**Speaker**  
**Akbar D. Nugraha, S.Kom, M.MSI**  
AA Kinerja di ULP Ngabang  
UP3 Pontianak, PT PLN (Persero) - UIW KalBar  
"Enhancing Customer Experience with Whatsapp Virtual Assistance"

**Speaker**  
**Bustani Hadi Wijaya, ST, MT, MSc**  
Alumni Pegawai Tugas Belajar Penghargaan Direksi PLN-ITB Batch 7 Angk. 2017  
Analyst Kelayakan Investasi Kelistrikan PT PLN (Persero) - UID Jatim  
"Dip Voltage Solution by Digital Asset Mapping"

**Speaker**  
**Very Fernando, ST**  
AE Management Asset Transmisi & Distribusi  
PT PLN (Persero) Kantor Pusat  
"Single Dashboard EAM to Support Advanced Analytics in Distribution"

**Opening**  
**Daru Tri Tjahjono**  
EVP Talent Development  
PT PLN (Persero)

**Panelist**  
**Raditya H. Nugraha**  
Manager Unit Pelaksana Pelayanan Pelanggan Makassar Selatan  
PT PLN (Persero) - UIW Sulselbar

**Host**  
**Virgea Krismanda**  
Pejabat Pelaksana KSUP3 Cianjur  
UID Jawa Barat &  
Millennial Director Key Opinion Leader  
Coaching Lab DMC2 2018-2020

**Host**  
**Helmy S.M. Putra**  
AA Pengelolaan S11 Kalimantan  
Div S11 Kalimantan &  
Millennial Director Key Opinion Leader  
Coaching Lab PETIR 2020-2022

**Panelist**  
**Aep Saepudin**  
Manager Unit Pelaksana Pelayanan Pelanggan Cikupa  
PT PLN (Persero) - UID Banten

#MariBerkaryaUntukNegeri [www.pln.co.id](http://www.pln.co.id)

#PowerBeyondGeneration

## Knowledge Sharing

PLNers : Panggilan untuk para Pegawai PLN Group  
Electrizens : Panggilan untuk Masyarakat Indonesia yang menjadi Pelanggan PLN

for  
**PLNers & Electrizens**



## #ACHIEVEMENTMILLENNIAL

# JUARA 1 TECHNOLOGY BREAKTHROUGH BUMN MILLENNIAL SUMMIT 2020

Karya millennial PLN unggul dalam bersaing dengan **156 BUMN** lainnya se-Indonesia

## Avator: The Future Calibrator

### TOP #10 Kategori Breakthrough Technology

- |   |   |
|---|---|
| #01  | #06  |
| #02  | #07  |
| #03  | #08  |
| #04  | #09  |
| #05  | #10  |

Total submisi Technology Breakthrough  
**sebanyak 4.094 inovasi**

**“Hasil tidak mengkhianati usaha”**







## #HARAPANpadaMILLENIALS

# PERGESERAN KEPAKARAN DUNIA KETENAGALISTRIKAN

### #Pembangkitan

- Boiler / Heat Recovery Steam Generator (HRSG)
- Turbin uap / gas / air
- Distributed Control System (DCS)
- Instrumen, control & proteksi
- Generator
- Kimia
- Metalurgi
- Proteksi Pembangkit
- Vibration
- Tribologi
- Welding
- Electrical Pembangkit
- Coal Handling
- Pompa Kompresor
- Piping valve
- Hidrolik pneumatik
- Efisiensi Pembangkitan

### #Penyaluran

- Trafo tenaga
- Peralatan utama transmisi
- Transmission line
- Proteksi
- SCADA / SAS
- Defense scheme
- PDKB transmisi
- Kabel TT / TET
- GIS
- Konstruksi Peralatan Sistem Transmisi
- Telekomunikasi
- Power System Analysis
- Simulasi Produksi Pembangkit

### #Penunjang

- K3
- Lingkungan
- Pengadaan
- Supply Chain Management
- Manajemen Dispute
- Komunikasi dan Negosiasi
- Stakeholder Management
- Perizinan
- Pajak
- Akuntansi Manajemen
- Manajemen SDM

### #Distribusi

- Proteksi & Stabilitas Sistem
- Power Quality
- Meter Transaksi
- Distribution Automation System (DAS)
- PDKB Distribusi
- Kabel TM
- Kubikel
- Konstruksi Peralatan Distribusi

### #Konstruksi

- Manajemen Kontrak
- Manajemen Konstruksi
- Manajemen Proyek

### #Operasi Sistem

- Scada / SAS
- Defence Scheme (Remedial Action Scheme)
- Telekomunikasi
- Power System Reliability & Stability
- Manajemen Energi
- Online Power System Analysis
- Transaksi Energi Listrik
- Master Station
- Power System Operation
- System Metering

### #Niaga

- Tata Usaha Langganan
- Pemasaran
- Riset Pasar dan Business Development
- Intelejen Pemasaran
- Marketing Communication
- Digital Marketing

### Kepakaran baru: Teknologi

1. Forecasting
2. Power Quality
3. Inverter technology
4. Storage technology
5. System integrator
6. Solar generation
7. Wind generation
8. Ocean Generation
9. Data Science
10. Apps. Developer
11. Electric Mobility
12. Artificial Intelligence
13. Cyber Security
14. Microgrid/hybrid expert
15. FACTS
16. Flexible Grid & Grid Defense system
17. Resilient Grid
18. Industry 4.0
19. Smart Energy
20. Blockchain

### Kepakaran Baru: Kognitif

1. New Service development
2. Rooftop PV development program
3. Communal Utilities development
4. Start up incubator
5. Mobile communication
6. Gender
7. Climate & Environment
8. Rural development
9. Demand Response
10. Teamwork & peer to peer team development
11. Etc.



# Belajar!



# THANK YOU

**“Power Beyond Generations”**

**BUMN** UNTUK INDONESIA





## ZULKIFLI ZAINI

*President Director*  
PT PLN (Persero)

### Education

1992-1994

Washington  
University in St.Louis–  
Olin Business School  
*Master of Business  
Administration*

1975-1980

Institut Teknologi  
Bandung  
*Civil Engineering*

### Experience

Dec 2019-Present

PT PLN (Persero)  
*President of BOD*

Jun 2019-Present

Indonesian Bankers  
Association (IBI)  
Dewan Pengawas

April 2011-Present

Indonesian Bankers  
Association (IBI)  
*Chairman*

July 2013-April 2015

PT PLN (Persero)  
*Commissioner*

July 2010-April 2013

Bank Mandiri  
*Former President  
and CEO*

**“EXECUTION MATTERS!”**