

News *Letter*

All activities and
entertainment

**Moving
Towards a
Sustainable
Green World**







NEWSLETTER

VOLUME 6

PENERBIT : ASOSIASI PRODUSEN CAT INDONESIA
GEDUNG JAKARTA DESIGN CENTER LANTAI 6, JL. GATOT
SUBROTO KAV 53 JAKARTA 10260

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Di tengah tantangan menghadapi pandemi Covid-19 dan pergerakan waktu yang begitu cepat, APCI kembali menerbitkan newsletter edisi yang ke-3.

Saya sebagai ketua APCI sangat mengapresiasi para anggota Komite Tetap yang dengan antusias terus mengadakan kegiatan di masa pandemi ini untuk memajukan industri cat di Indonesia.

Tahun ini adalah tahun yang penuh tantangan dengan masuknya covid varian Delta ke Indonesia. Pemerintah telah menjalankan PPKM yang ke dua kalinya secara nasional dan tentunya akan berdampak besar pada ekonomi nasional dan industri cat Indonesia.

Puji syukur karena perjuangan APCI pada tahun 2020 lalu, industri cat telah mendapatkan dispensasi sebagai industri esensial atau kritikal sehingga Industri cat dapat tetap beroperasi selama PPKM. Walau begitu, sangat disayangkan bahwa banyak toko cat dan bahan bangunan masih belum mempunyai asosiasi untuk memperjuangkan kepentingan mereka sehingga banyak yang terpaksa tutup sementara. APCI pun sedang membahas hal ini untuk mencari solusinya.

Tahun ini adalah tahun yang menyedihkan bagi kita dengan banyaknya berita duka yang kita terima, termasuk dengan berpulangnya Bapak Agus Sasmito, salah satu pendiri APCI dan pendiri Mowilex, serta salah satu pakar Industri cat di Indonesia. Mengenang Pak Agus Sasmito, ibu saya pun bercerita bahwa dulunya ia dan Pak Agus turut aktif mendirikan APCI. Atas kontribusi dan dedikasinya, kita semua anggota APCI mengucapkan ikut berbelas sungkawa yang sedalam-dalamnya atas berpulangnya Bapak Agus Sasmito. Kontribusi yang telah beliau berikan bagi kemajuan industri cat di Tanah Air tidak akan kami lupakan.

Kawan-kawan, pandemi masih terus menjadi tantangan bagi kita. Tetapi seperti badai, pandemi ini juga pasti akan berlalu. Dalam masa-masa sulit ini, kita harus terus berkerja keras untuk membangun industri cat dalam negeri, sehingga ketika keadaan sudah normal kembali, industri cat Indonesia akan bertambah kuat lagi. Para Komite Tetap (Komtap), terutama Komtap SDM sekarang sedang bekerja keras untuk meningkatkan kompetensi teknis dan pengetahuan dari semua pabrik cat. Program yang akan diangkat sangat luar biasa dan mari kita tunggu tanggal mainnya.

Saya juga ingin memberikan apresiasi kepada Troy dan Allnex, karena dengan mereka APCI dapat mewujudkan cita-cita-nya.

Akhir kata, kami segenap pengurus APCI mempersembahkan newsletter yang ke-3 ini sebagai bagian dari laporan kinerja APCI. Mohon diterima dengan baik dan saya terus mengundang semua anggota APCI untuk lebih berpartisipasi dalam memajukan APCI.

Terima kasih
Kris Adidarma
Ketua APCI



Photo of participant

Berbangga sekali karena Asosiasi Produsen Cat Indonesia (APCI) menjadi tuan rumah penyelenggaraan pertemuan APIC pada tanggal 19 Oktober 2023 kemarin. Acara ini sukses-

diselenggarakan di Holiday Inn Hotel, Kemayoran, Jakarta - Indonesia. Meriahnya acara ini dibuka dengan penampilan Tarian dan angklung dari Siswa SMK Mitra Industri. Acara ini juga dihadiri oleh peserta dari berbagai negara yaitu dari Singapura, Australia, China, Malaysia, Filipina, Jepang, Vietnam, Thailand, Taiwan, dan Bangladesh dan dibuka dengan *speech* dari bapak Kementerian Perindustrian H.E. MR. Agus Gumiwang Kartasasmita dan Bapak Ketua APCI Kris Adidarma.



Photo of Dance and Angklung Performance

PROFILE, DEVELOPMENT, AND OPPORTUNITY IN PAINT INDUSTRY

KEMENTRIAN PERINDUSTRIAN

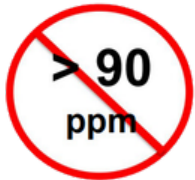
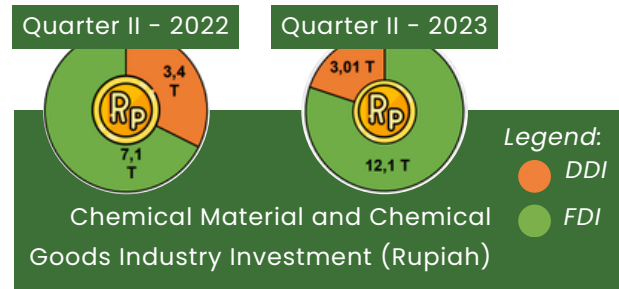
Non-oil & Gas Processing Industry GDP has growth by 4,56%. Chemical Material and Chemical Goods Industry GDP has growth by 0,58%.

The paint industry is a strategic sector closely related to other industries. The paint industry's market segments are extensive, including-



Photo of Mr. Agus Gumiwang
(Kementerian Perindustrian)

government or private projects are always in need with paint. Indonesia has 150 Total of Manufacturers, 1,5 million MT/year Installed Capacity, 75% Production Utility, with 36.000 employees.



Indonesia has 5 HS Code with The Highest Export value and 5 HS Code with The Highest Import Value. Source by Model Law and Guidance for Regulating Lead Paint, 2018 (World Health Organization), "Paint and similar coating materials must not contain lead (calculated as lead metal) in excess of 90 ppm of the weight of the total non volatile content of the paint or the weight of the dried paint film".



The concentration limit for total lead recommended by the Model Law and Guidance for Regulating Lead Paint is 90 parts per million (ppm). It is the lowest, most protective regulatory limit for lead paint that has been set in countries. This limits is not health based, but represents a low, technically feasible limit for paint manufacturers to achieve." - Global Alliance to Eliminate Lead Paint, 2021 (World Health Organization)

TAX HOLIDAY (Minister of Finance Regulation 130/2020) Corporate Income Tax Reduction for Pioneer Industries that provide high value-added and externalities, introduce new technologies, and hold strategic significance for the national economy. Eligibility is given to the paint raw materials industry with a minimum new capital investment of at least IDR 100,000,000,000.00 (one hundred billion Indonesian Rupiah).

TAX ALLOWANCE (Government Regulation 78/2019) Corporate Income Tax Facility are given for new capital investment or expansion in specific sectors that are considered national priorities and certain regions with promising development potential.

VOCATIONAL SUPERDEDUCTION TAX (Minister of Finance Regulation 128/2019) The highest Gross Income Reduction of up to 200% for Industries conducting internship, apprenticeship, and/or learning activities to enhance the competency and competitiveness of human resources.

R&D SUPERDEDUCTION TAX (Minister of Finance Regulation 153/2020) The-

highest Gross Income Reduction of up to 300% for Industries conducting specific research and development activities.

6 IMPORT DUTY EXEMPTION (Minister of Finance Regulation 176/2009) For investment in construction and development project, import duty exemption is granted for the import of unavailable raw materials.



Photo of Yoshiko Norizuko

ASIAN PAINT INDUSTRY COUNCIL UPDATES 2022

Paint & Printing Ink Association Network



LATINPIN

Est. 2014/7 associations

- ARGENTINA
- COLOMBIA
- URUGUAY
- EQUADOR
- BOLIVIA
- BRAZIL
- MEXICO



Asian Paint Industry Council

Est. 1995/13 associations

- | | | |
|-----------|-------------|-----------|
| AUSTRALIA | BANGLADESH | SINGAPORE |
| CHINA | INDONESIA | TAIWAN |
| JAPAN | KOREA | THAILAND |
| MALAYSIA | PHILIPPINES | VIETNAM |



World Coatings Council (Former IPPIC)

Est. 1992/7 associations

- | | | | | |
|--------------|---------------|---|-----------|--------|
| USA | EUROPE (CEPE) | UK | AUSTRALIA | BRAZIL |
| CANADA | TURKEY | SPAIN | CHINA | MEXICO |
| NEW ZEALAND | FRANCE | MIDDLE EAST PAINTS & COATINGS ASSOCIATION | JAPAN | |
| SOUTH AFRICA | GERMANY | | MALAYSIA | |

About APIC

The APIC will serve as a forum for open dialogue and exchange between the participating organizations on issue of common interest.

Japan Paint Manufacturers Association (JPMA) will serve as the current Secretariat for the APIC.

The role of the Secretariat shall be to ensure timely communication amongst the participants and to organize and administer the APIC meetings.

The meetings of the APIC will be organized and chaired by the host country. Such meetings shall rotate amongst the APIC membership.



Poster of APIC Meeting 2022

Last year's apic meeting was held in Beijing on November 22 2022 with the theme Asian Paint Industry Council Meeting Hosted by China National Coating Industry Association (CNCIA) with 360 attendees 11 APIC associations, WCC, CNCIA Members. with several topics;

- The president of CNCIA, Mrs. Sun Lianying made the opening speech,
- APIC association reports
- Lingering pandemic and unstable international situation led to shrinking demand, raw material prices
- Surge, labor force shortage. Association efforts were heard on lobbying with the government on

- Chemical regulation, standardization, SDGs efforts, etc
- WCC updates
- Asia Pacific Top 30 companies report by Orr & Boss
- CNCIA member topics

GLOBAL MARKET TRENDS AND WORLD COATINGS COUNCIL PRIORITIES

WORLD COATINGS COUNCIL

Established in 1992, the council ensures that industry coordinates the development of industry policy on international issues.

Granted NGO status in 2005 from the United Nations Economic and Social Council.

Sixteen association members representing all areas of globe.

All members pay annual dues based on the size of their organizations.

ACA serves as Secretariat and provides staffing.

Global growth rates to improve in 2024

We expect global volume growth this year to be flat to down 0.1% and value to be up 4%. In 2024, we expect volume growth of 2.6% and value of 3.8%

***Most of the growth is in Asia and the Middle East.**



Photo of Tom Bowtell (President of BCF, CEO of WCC)

GLOBAL MARKET TRENDS AND WORLD COATINGS COUNCIL PRIORITIES

Global Paint Market

The global paint & coatings market is estimated to be €181 billion and 47.9 billion liters. Decorative is the largest segment & Asia is the largest region. With a value 47.8%.



2023 Global Coatings Market €181 Billion

Asia Paint & Coatings Market

Asia is by far the largest market.

*Paint & Coatings market is estimated to be €81 billion.

Due to the Size of the market, we split Asia up into 6 sub-regions.

*China is over 50% of the market.

*Japan & Korea and South Asia are close the same size.



2023 Asia Coatings Market €81 Billion

China Paint & Coatings Market

The Greater China paint & coatings market is the largest in the world at €45 billion. In 2022, volume growth was minimal.

China Growth Rates

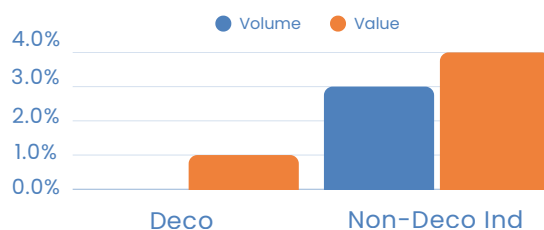
China slowly recovering this year.

*The recovery is not as robust as previously predicted and much less strong than the recovery in 2H 2020.

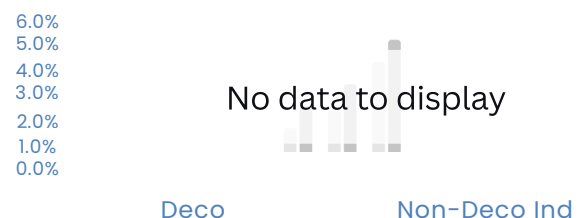
The property market continues to struggle

*Going forward growth should improve.

2024 China Growth Rates



2024-2028 China Growth Rates



Asia Regional Growth Rates

Japan: Expected slow growth in volume; 7-8% value increase; automotive rebounding with some recovery in the decorative markets. South Asia: India is the global growth leader; strong deco demand.

*Benefitting from the near-shoring trend.

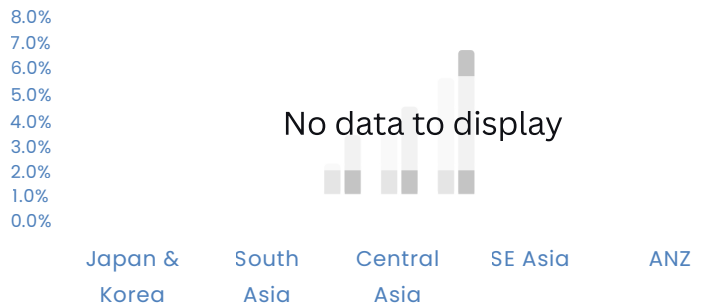
Asia Regional Growth Rates

Central Asia: Forecasted to grow this year; oil and mineral prices drive the economy.

SE Asia: Mixed picture this year but longer-term prospects are strong.

***Vietnam and others benefitting from the near shoring trend.**

Australia & New Zealand: Mature market; steady growth.

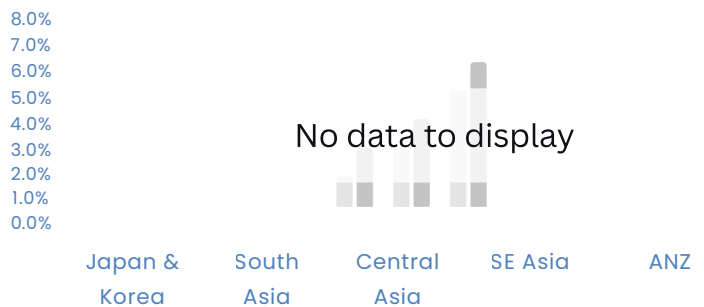


Top 50 Country Metrics

Orr & Boss analyzes the top 50 Coatings country markets around the world

*These 50 countries are 92% of the paint & coatings global demand. The key factors that we use to analyze these 50 countries include:

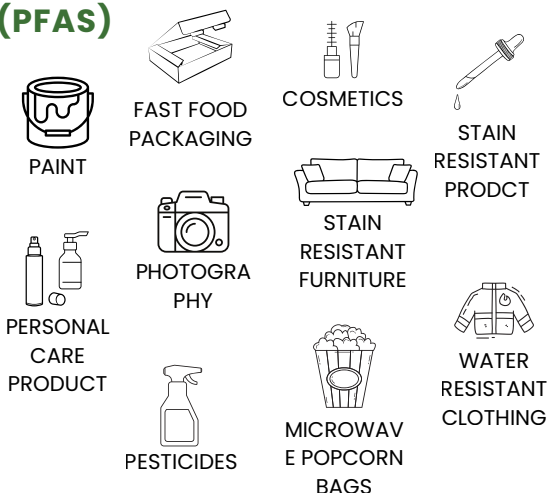
1. Size of the Coatings Markets
2. GDP Growth Rate
3. Current Population
4. Population Growth
5. Median Age
6. Urbanization Rate
7. Per Capita Coatings Spend



COUNTRY RANKING	COUNTRY	TOTAL PAINT & COATINGS MARKET SIZE (MILLIONS OF USDS)	2022 - 2027 GDP GROWTH RATE
1.	India	\$ 12,150	6.96%
2.	Malaysia	\$ 1,000	4.80%
3.	Indonesia	\$ 2,400	5.26%
4.	Bangladesh	\$ 830	6.92%
5.	China	\$ 47,500	4.87%
6.	Brazil	\$ 4,100	1.74%
7.	Vietnam	\$ 1,200	6.81%
8.	Egypt	\$ 1,125	5.65%
9.	Philippines	\$ 770	6.46%
10.	UAE	\$ 825	4.01%

The top 10 countries 10 Most Attractive Markets

PerFluoroAlkyl and PolyFluoroAlkyl Substances (PFAS)



WCC Sustainability Report

We do a lot activities such as Interviews with WCC associations, member companies and external stakeholders, Contributions to 9 UN SDGs, Materiality assessment, best Practices (cases studies), launched at Coatings Summit in December 2022.

GLOBAL MARKET TRENDS AND WORLD COATINGS COUNCIL PRIORITIES

WCC published a Key Performance Indicator (KPI) Guide for Sustainable Development Goals:

- Released in spring 2023, this resource provides associations and companies with sustainability program tracking and reporting tools, using 9 relevant UN SDGs as a framework, and categorizes KPIs as essential or advanced for growth and improvement.

Future IMO Meetings

- PPR 11 → Feb 23-29, 2024
- MEPC 81 → Mar 18-22, 2024
- MEPC 82 → Oct 30-Nov 4, 2024



Poster of WWC Sustainability

Mica is a key raw material

Functional filler



Construction industry



Oil industry

Pearlescent pigments



Electronics & cable



Paints and coatings

Electronic components



Cosmetics and pigments



Automotive



Plastics and printing ink

Responsible Mica Initiative

- WCC currently serves on the Board of RMI (mica), providing oversight.
- WCC attends RMI annual meetings



INDONESIAN PAINT MANUFACTURER ASSOCIATION (APCI)

Import Exports Growth in Indonesia

- Surplus of \$3.5b in September
- 41 consecutive trade surplus
- Bank Indonesia may not yet loosen its monetary policy even though Indonesia's headline inflation rate has returned to BI's target range (2 – 4%) in the second semester of this year.
- The USD/IDR exchange rate is in the range of 15,700, slightly higher compared to around 15,600 at the beginning of 2023



Photo of Kris Adidarma (CEO of Propan Raya, President of APCI)

Find Us:



apci.info



APCI info

Preliminary forecast for Building Construction 2024

- The building construction market activity is markedly strong during this year and tipped to peak in the fourth quarter of 2023
- Started in early 2024, in the immediate run-up to the election, the building market will play out against a challenging political backdrop
- Refer to the existing project pipelines in planning stage, a declining market trend in the first semester of 2024 may be unavoidable
- The building projects both government-funded and schemes by private developers will slow down until the political landscape became clearer
- The emerging sector trends in building sector proved successful this year will continues to influence the trend to come in 2024

How will election impact the construction sector?

Government had earmarked **Rp 37.4 trillion** to fund the election process leading up to the balloting day in February 2024.

The elections are a potential source of economic uncertainty, especially so for elections that take place in a **politically polarized context**.

Impact to public projects, may will dampen the pace of growth to a more modest as public sector expenditure plans are reviewed pre, during and post-election.

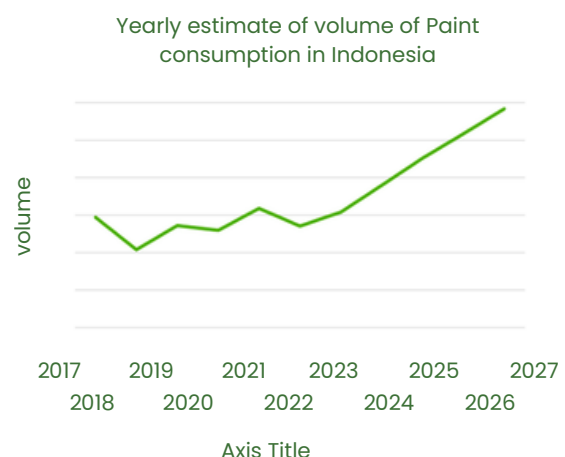
Impact to commercial projects, generally marked by caution and a wait-and-see attitude. Typically it will has cause to a slowing in property transaction and property market activity

The best scenario, if presidential election takes only one round, then government will save more budget and reduce political uncertainty. A possible return to normal after the elections will started in Q2 of 2024

In case two-round election, the uncertainty will continues looms

Total paint consumption projection of Indonesia

- Construction spending in Indonesia will enjoy a healthy 5.1% compound annual growth rate (CAGR) between 2022 and 2027 with growth led by the infrastructure segment. In the longer run, growth will slow to a 4.2% compound annual rate between 2027 and 2032. The infrastructure segment will again demonstrate the-



-highest growth over the period.

- Construction spending in Indonesia will enjoy a healthy 5.1% compound annual growth rate (CAGR) between 2022 and 2027 with growth led by the infrastructure segment. In the longer run, growth will slow to a 4.2% compound annual rate between 2027 and 2032. The infrastructure segment will again demonstrate the highest growth over the period.
- Indonesia is working on large-scale infrastructure projects to modernize and restructure the country, including for the relocation of the capital city to East Kalimantan.
- The construction industry remains positive with healthy growth expected, although the industry may face challenges from high commodity prices and the ongoing global economic slowdown.

From Jakarta to Nusantara: New Capital as a Green City to Realize a More Inclusive and Equitable Economic Growth



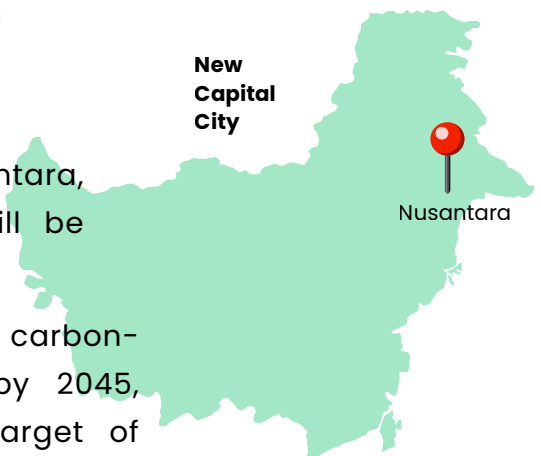
65% of Nusantara area will be forests



In the development of Nusantara, reforestation of ex-industrial area will be done by endemic trees replanting



Nusantara will be the first carbon-neutral city in Indonesia by 2045, earlier than the national target of 2060



Coating trends toward sustainability



Electric Vehicle

Indonesia has ambitious intentions to become a prominent player in the **electric vehicle sector**, given the country's nickel reserves.

The goal is to have 2.1 million electric motorcycles and 400,000 electric vehicles on the road by 2025, with 20% of them being manufactured locally.

All-electric bus fleet for Jakarta's in less than seven years, 14,000 electric buses.

PLN has committed to installing over 31,000 additional electric vehicle charging stations by 2030.

Public charging points are increasingly necessary to enable wider EV uptake.



ASOSIASI PRODUSEN CAT INDONESIA (INDONESIAN PAINT MANUFACTURE ASSOCIATION)

Vision:

Bringing local company to be host in our own country with world class reputation in quality and technology.

Mission:

- A forum for channeling members' activities and aspirations.
- As a government partner in bridging communication between the government and paint manufacturers.
- To protect, equip and develop the paint industry with current knowledge and technology about paint by collaboration with stakeholders.
- Play a role in the success of national development.
- To protect consumers from non-standard products and those that endanger health.
- Encourage paint manufacturers to produce eco-friendly products.
- To be a center for information and statistical data related to the paint business and industry.



APCI has 4 Standing Committees:

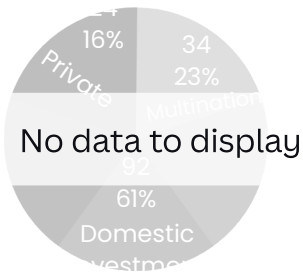
1. Industrial Development

3. Environmental Issue

2. Product Standardization

4. Human Resource

GENERAL OVERVIEW OF THE DOMESTIC PAINT INDUSTRY



Market segment include: MOPC, Decorative Automotive, Industrial, Wood finish, etc.

Installed capacity is about 1,5 mio MT/year Domestic demand is about 1,1 mio MT/year

Total worker around 36.000 people

Current APCI members is 71 companies from total about 150 paint companies, almost all of which are located in Java Island

APCI Program for Vocational Education

Purposes :

- In line with APCI's vision in Komtapi SDM
- Support government to strengthen vocational revitalization education
- Ensure output of vocational school is demand driven (link and match with industrial needs)
- APCI collaborates with vocational school (SMK Mitra Industri MM2100) to have new majoring Paints Technology



Photo of The building for Paints Technology that will be ready on 2024

The output

- New Majoring programme with specialist Paint applicator and Lab Technician at SMK Mitra Industri MM2100.
- Support APCI members to have competence employees as expectation.
- Support government in strengthening of Vocational Revitalization Education.

SMK MITRA INDUSTRI MM2100 PROFILE

Our background is to link and match within education and Industry.

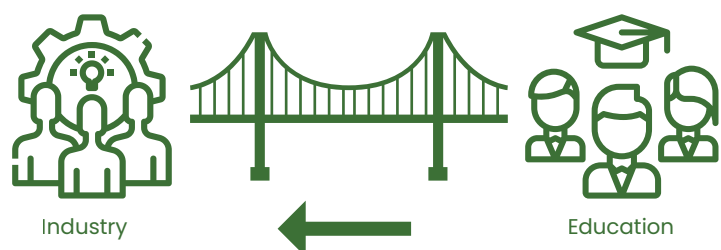




Photo of...

Kebutuhan Tenaga Kerja:

- Bekasi, Kawasan Industri Terbesar
- Kebutuhan Tenaga operator
- Sistem kerja kontrak
- Frekuensi rekrut setiap hari
- Petumbuhan industri manufaktur terus meningkat

vs

Kualitas Lulusan SMK:

Kompetensi tidak memenuhi kebutuhan industri:

- Pengetahuan : Produktif tidak terupdate, Matematika dasar sangat kurang
- Keterampilan : di bawah standard
- Sikap : Pasif, kurang percaya diri, malas, susah beradaptasi, dan tidak suka tantangan

History of SMK Mitra Industri MM2100 Profile

SMK Mitra Industri MM2100 Didirikan pada tanggal 16 Februari 2011 di lahan 2 Hektar. Pendiri Yayasan adalah Mitra Industri Mandiri. Pengelola Kawasan Industri adalah MM2100 dan FKKSM MM2100 Didukung oleh perusahaan di Kawasan Industri MM2100.

Jurusan kami

Teknik Sepeda Motor



Teknik Elektronika Industri



Teknik Kendaraan Ringan (TKR)



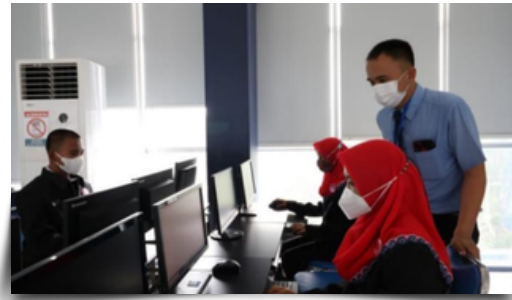
Teknik Pemesinan



Teknik Instalasi Tenaga Listrik



Akuntansi



Akomodasi Perhotelan



Teknik Kimia Industri



Visi

SMK Mitra Industri MM2100 sebagai pusat pendidikan dan pengembangan yang mencetak siswa sesuai dengan kebutuhan industri dan berjiwa wirausaha.

Misi

1. Membentuk karakter siswa berperilaku positif
2. Membekali siswa dengan pengetahuan dan keterampilan sesuai kebutuhan industri
3. Membangun jiwa wirausaha yang tangguh

Data Sekolah Tahun Pelajaran 2023/2024 (Jumlah)



Guru 94



Murid 2587



Tamu Kunjungan 512

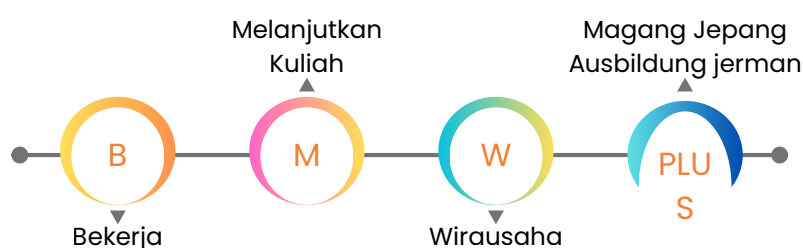


MOU Perusahaan 234



MOU Sekolah 18

Peminatan



Presentase Sebaran Lulusan Angkatan 1-9

kerja	kuliah	wirausaha	magang jepang	ausbuilding (Jerman)	Jumlah
3299	819	17	440	25	4600

Output



Menghasilkan lulusan yang berkarakter positif yang menjalankan 5 Nilai (Jujur, Tanggung Jawab, Disiplin, Kerjasama & Peduli) & 6S (Senyum, Salam, Sapa, Sopan, Santun, Semangat).



Mendapatkan minat sesuai dengan impiannya (BMW Plus) (Bekerja, Melanjutkan Kuliah, Wirausaha, Magang ke Jepang, Ausbildung Jerman).



Mempunyai kompetensi yang dibutuhkan DUDI (Dunia Usaha dan Dunia Industri)

Peserta Magang LPK Horenso Indonesia



Angkatan I Tahun 2019
(8 orang ke Fukuoka Jepang)



Angkatan II Tahun 2022
(70 Orang ke Hiroshima, Hyogo dan Yamaguchi Jepang)

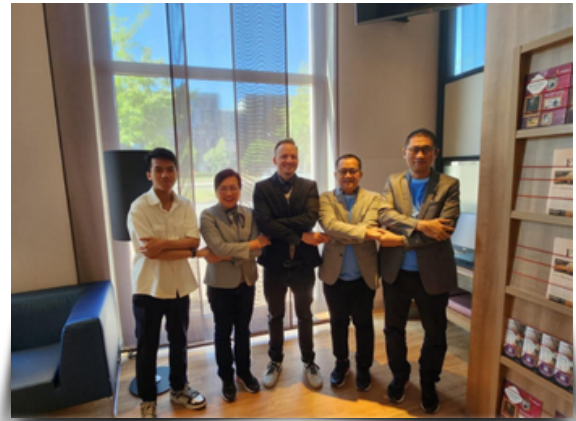
Pelepasan Peserta Magang Jepang dan Ausbildung (Oleh Ibu Dr.Ir Kiki Yuliati, M.Sc)



Tamu Menteri Ketenagakerjaan Republik Indonesia



MoU Ausbildung dengan GO GERMAN



Benchmark ke Tokyo Metropolitan Nerima Vocational High School (18 Mei 2023)



Kunjungan yang Mulia Kaisar Jepang Naruhito dan Permaisuri Masako Kunjungan 20 Juni 2023



Keunggulan SMK Mitra Industri MM2100

- Diprakarsai dan manajemen sekolah oleh para praktisi HRD
- Lokasi berada di Kawasan Industri MM2100
- Sistem Pendidikan Link & Match dengan Industri
- Menjalankan Segitiga Emas Komunikasi
- Piramida Kompetensi pembelajaran 20% pengetahuan, 30% keterampilan, 50% Sikap
- Menerapkan Budaya Industri
- Strong Networking dengan industri
- Alur pembelajaran dinamis berdasarkan peminatan BMW plus (Bekerja, Melanjutkan Kuliah, Wirausaha, Magang ke Jepang dan Ausbildung Jerman)
- Bekerjasama dengan Sekolah, Kampus, Perusahaan Jepang

SMK Mitra Industri MM2100 Kampus Putradarma



SMK Mitra Industri 02 Pati



Pictures of Choi Mun Hon (TSBD
Manager SEAO)

ALLNEX SUSTAINABILITY SOLUTIONS

ALLNEX

Allnex Reducing Carbon Footprint in Automotive OEM Low Bake Coating System For All Layers.

SAVE BOTH CO2 AND COSTS

The substantial benefits of a full low bake system.

Statements from the industry

- Paint ovens consume typically > 20% of the total energy spent in an automotive OEM paint shop.
- It is estimated that around 25% to 35% of total CO2 emissions during the car production process are generated from the paint shop.
- Implementation of a low bake system results in 15 – 20% energy saving compared to standard OEM process.

Allnex statement

- By moving to a full low bake system (primer – basecoat – clearcoat), a significant positive effect is achieved regarding both: CO2 reduction, and Cost saving.
- In addition, low bake leads to further complexity reduction by enabling a multi-substrate approach: Metals and plastics, Carbonfiber-reinforced components, and Sheet-molded parts.

Application results (allnex's full low bake system)

BAKE LOW TO SCORE HIGH IN LOOKS

Appearance and Sag resistance

Appearance	ALLNEX LOW BAKE SYSTEM	HIGH BAKE CLEAR COAT REFERENCE
Dullness	+	+
LW	++	+
SW	++	+
DOI	++	+
Gloss (20°)	++	+
Sag Resistance	+	+

Before measuring appearance all panels were allowed to post-cure for 7 days at 23 °C/50% RH.

- Excellent appearance of allnex full low bake system
- Very good sag resistance with sSCA for low bake application

+/- not so good

+ good

++ better



THE PERFECT CHEMISTRY FOR REMAINING UNHARMED

Chemical resistance

Chemical resistance – gradient oven	ALLNEX FULL LOW BAKE SYSTEM	HIGH BAKE CLEAR COAT REFERENCE
1% H2 SO4	+	+
Pancreatin 1:1 H2O	+	+
Deionized water	+	+
1% NaOH	+	+
Tree resin	+	+

Before exposing panels to chemical resistance testing all panels were allowed to post-cure for 7 days at 23 °C/50% RH.

- allnex low bake system ensures excellent chemical resistance on par with high bake reference.



Chemical resistance – xylene resistance	ALLNEX FULL LOW BAKE SYSTEM	HIGH BAKE CLEAR COAT REFERENCE
1 hour	+	+
1 day	+	+
1 week	+	+

allnex low bake system has good xylene resistance, similar to high bake reference.

+/- not so good

+ good

++ better



Before exposing panels to hardness and xylene testing no further post-curing of panels. Tests were started 1 hour after CC drying (30 min/80 °C) was finalized

Satisfactory hardness and excellent stone chip resistance

- Sufficient hardness development of allnex low bake system
- Excellent dry stone chip resistance of allnex low bake system
- Excellent stone chip after PV 1200 of allnex low bake system

QCT condensation tests and humidity

- No blistering and whitening with the allnex low bake system.
- Excellent gloss with the allnex low bake system, both before and after exposure.
- Much lower starting haze with the allnex low bake system and no significant increase after exposure.
- Very good flexibility (cupping and impact) with the allnex low bake system.
- Excellent adhesion with the allnex low bake system.

QCT condensation tests and humidity

Overall excellent performance of allnex full low bake system compared to conventional high bake market reference.

Why baking low with allnex leads to high sustainability

- allnex offers sustainable solutions for OEM low bake for all layers.
 - Enabling 15–20% CO2 reduction compared to standard OEM process.
 - Economic advantages, especially with current high energy prices.
- Low bake system can be used for metal car body as well as plastic parts.
- allnex's low bake solutions interesting for other (outside automotive OEM) segments as well
 - Industrial stoving applications
 - Wheel coatings

A CITY OF GREEN POSSIBILITIES

SINGAPORE PAINT INDUSTRIES ASSOCIATION (SPIA)

ECONOMIC PERFORMANCE

In the second quarter of 2023:

- The Singapore economy grew by 0.5% on a year-on-year basis in Q2 2023, extending the 0.4% growth in the previous quarter (Q1 2023).
- The sectors that contributed the most to GDP growth were transportation & storage, other services and construction.



Real GDP grew by
0,5% in 2023



Pamela Phua (President, Chairman, Technical Committee)

Main drivers of growth in 2023

Transportation & Storage

0,4% -POINT
Contribution



Other service Industries

0,3% -POINT
Contribution



Manufacturing ↓

In Q2 2023:

The manufacturing sector shrank by 7.3% year-on-year, worse than the 5.4% contraction in the previous quarter.

The weak performance of the sector was due to output declines across all clusters except for the transport engineering cluster, which surged by 18.3%.

Among the clusters that contracted, electronics (-12.1%) and precision engineering (-8.6 %) saw the largest declines.

Sector Growth- Construction ↑

The **construction** sector grew by 6.8% year-on-year, similar to the 6.9% growth in the preceding quarter. Both public and private sector construction output increased during the quarter.

Construction Contracts awarded ↓

Construction demand in terms of contracts awarded fell by 11.6% year-on-year in the second quarter, deteriorating from the 1.0% contraction in the previous quarter (Exhibit 2.3).

The fall in contracts awarded during the quarter was on account of lower public sector construction demand (-25.4 %), which outweighed an increase in private sector construction demand (3.9 per cent).

The former was led by a fall in contracts awarded for public civil engineering (-68.7%) and institutional & others building (-29.8%) works, while the latter was driven by an increase in contracts awarded for private industrial (165%) and commercial (4.7%) building works.

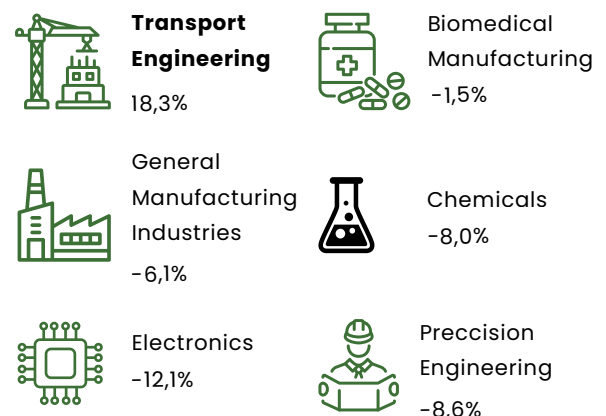
Unit Labour Cost (ULC) ↑

Unit Labour Cost (ULC) for the economy rose by 10.2% year-on-year in the second quarter of 2023 (Exhibit 1.9), extending the 10.1% increase in the preceding quarter.

The rise in overall ULC during the quarter was due to:

- An increase in total labour cost per worker.
- Fall in labour productivity as measured by real value-added per worker.

cluster in manufacturing Sector



Unit Business Cost (UBC) ↑

Unit business cost (UBC) for the manufacturing sector rose by 5.2% year-on-year in the second quarter, extending the 4.0% increase in the-

previous quarter (Exhibit 1.10).

Economic Outlook for Singapore for Y2023

- Overall, the Ministry of Trade & Industry's assessment is that Singapore's external demand outlook for the rest of the year remains weak.
- Apart from the expected slowdown in Singapore's key external demand markets, the global electronics downturn is also likely to be protracted, with a gradual recovery expected towards the end of the year at the earliest.
- At the same time, downside risks in the global economy – persistent inflation in advanced economies, escalations in the war in Ukraine and geopolitical tensions among major global powers could lead to renewed supply disruptions, dampen consumer and business confidence, as well as weigh on global trade. Against this backdrop, the growth outlook for the manufacturing sector in Singapore remains weak for the rest of the year.
- On the other hand, the growth outlook for aviation and tourism-related sectors such as air transport and accommodation remains positive given the ongoing recovery in international air travel and inbound tourism.
- Taking into account the performance of the Singapore economy in the first half of 2023,¹ as well as the latest global and domestic economic developments, MTI has narrowed the GDP growth forecast for 2023 to "0.5 to 1.5 per cent", from "0.5 to 2.5 per cent".

Safeguarding Our Future

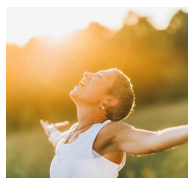


Key Pillars For A Greener Future

Embedded Sustainability



Positive Living



Doing More With Less





Photo of Singapore Green Plan

HDB Green Towns Programme

The Green Towns Programme is a 10-year plan to make HDB towns more sustainable and liveable.

There are 5 focus areas in the programme that aims to reduce energy consumption in HDB towns by 15% by 2030 (from 2020's levels).

- Reducing Energy Consumption
- Recycling Rainwater
- Reducing Waste
- Promoting Green Commute
- Cooling HDB Towns



Singapore Green Towns Programme

Industry Guidelines for Indoor Air Quality

BCA & NEA Guideline in Indoor Air Quality

Acceptable level of carbon dioxide, carbon monoxide, formaldehyde, ozone, volatile organic chemicals, total bacterial counts, total fungal counts, suspended particulate matter, air temperature, relative humidity, and air movement.

Scope of Products

All products for indoor applications across Retail & Project segments.

Product categories include:

- Wall paints
- Wood & Metal Paints
- Floor coatings

INDUSTRY GUIDELINES FOR INDOOR AIR QUALITY in Singapore

Background
According to the World Health Organization (WHO), air pollution causes **7 MILLION** premature deaths globally each year. **90%** of our time is spent indoors, placing us at health risk when exposed to poor indoor air quality.

HEALTH IMPACTS OF POOR INDOOR AIR QUALITY
Cardiovascular Disease, Cancer, Respiratory Disease, Sick Building Syndrome.

WAYS TO ENHANCE AIR QUALITY
Knowledge on how to maintain good indoor air quality is critical in ensuring the health and safety of building occupants. Consultations were conducted with industry stakeholders to develop 5 guidelines and 3 recommendations to amplify industry efforts to improve indoor air quality.

GUIDELINES 5 & RECOMMENDATIONS 3

Launched 4 January 2023

Alliance for Action (AfA)
SINGAPORE BUSINESS FEDERATION, sfic, SINGAPORE GREEN BUILDING COUNCIL

Supported by
Building and Construction Authority, National Environment Agency

Source: https://www.sgbc.sg/images/AFA_IAQ_2023.pdf

<https://www.channelnewsasia.com/singapore/building-sector-better-indoor-air-quality-3187416>
<https://www.straitstimes.com/singapore/environment/govt-to-consider-regulating-emissions-in-building-products-to-improve-indoor-air-quality>
<https://www.zaobao.com.sg/news/singapore/story20230105-1350128>

Photo of Industry Guidelines for Indoor Air Quality

SUSTAINABILITY

AUSTRALIAN PAINT MANUFACTURERS FEDERATION (APMF)

APMF identified the need to address the growing volume of unused and waste paint and packaging across Australia, proposing a scheme to collect unwanted paint, starting with a successful pilot project in Victoria and leading to a national scheme in 2016. Funded by a 15 cent per litre levy on paints sold by participating companies, the scheme now has over 165 collection points nationwide and also deals with paint from non-participants.

Paintback has collected over 45 million kilograms of unwanted paint and packaging, establishing sites to process and recover waste, supplying raw materials to downstream customers. Unwanted paint is reprocessed for road construction and concrete, metal paint tins are recycled, plastic paint pails are made into general-purpose buckets, and efforts are underway to standardize refillable pails across manufacturers.

The government is exploring imposing packaging recycled content requirements on manufacturers. While APMF supports recycling targets, there needs to be a flexible approach to their adoption.



Bernad Lee

- Physical limitation on the amount of recycled content in metal paint tins.
- For plastic pales, many are already repurposed by consumers and professional painters –as buckets. This needs to be recognised.
- Preference for white plastic pales as they give a true and uniform reflection of the paint colour/tint.
- Pales with recycled content are off-white and impacted by recycled content.
- Better uses for recycling materials derived from paint pales.

Our Focus

Paints play a crucial role in the circular economy by extending the life of assets and structures, reducing the need for replacement and recycling, while our commitment to minimizing environmental impact includes advancements in manufacturing technology, product innovation, and consumer education. Additionally, paints and coatings contribute to carbon emissions reduction through antifouling for maritime fuel efficiency, solar panel production, and transport infrastructure, offering STEM career opportunities globally

Change of Strategy

Public perception of the paints and coatings sector is generally very positive.



Photos of participant

We are not top-of-mind in terms of the general public's environmental concerns. People see the utility and benefits of our products.

Increasing focus from activist groups (for example paint is plastic, paints are a major source of PFAS etc.) Many of these claims are not accurate and tend to be misleading. The traditional approach has been to remain silent and not give these claims oxygen or fuel a debate.

We see an increasing need to actively promote the benefits of paints and coatings and address misleading claims about our products. The perception that paints and coatings are a principal source of PFAS has impacted regulators' approaches to dealing with waste paints.

INTRODUCTION OF CNCIA AND WORK FOR THE INDUSTRY

CHINA NATIONAL COATINGS INDUSTRY ASSOCIATION



kris Adidarma

Profile

CNCIA is the only national coatings social group consisting of Chinese coatings upstream and downstream enterprises and related enterprises and public institutions, six departments, three companies and a total of 22 branches.

On February 13, 2023, CNCIA held a members representative congress and council meeting, and Mr. Liu Pujun was elected President of the Ninth Council of CNCIA.

CNCIA now has 1,221 members.

Economic performance of China's coatings industry

In 2022, under the influence of the pandemic,-

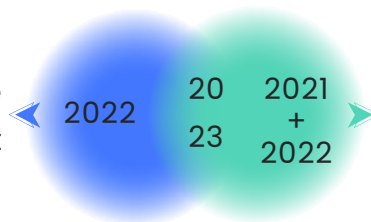
-the output of China's coatings industry was 8.5% lower, the main business revenue was 5.2% lower, and the total profit was 23.7% lower than the previous year.

As China's economy stabilized in 2023, from January to August 2023, the total output of China's coatings industry was 6% higher, the main business revenue was 4.7% lower, and the total profit was 19.7% higher than the same period in 2022.

Forecast of China's coatings industry development in 2023

Compared with 2022

Output growth 8%-10%;
Main business revenue growth 3%-5%;
Total profit growth 16%



Compared with average level of 2021 - 2022

Output growth 1%-2%;
Main business revenue growth -1%;
Total profit growth -3.8%.

In the second half of 2023, the coatings industry maintained stable growth over all. Due to objective circumstances, the 2022 base number is low and the 2021 base number is high. Comprehensive comparison with the two years is more scientific.

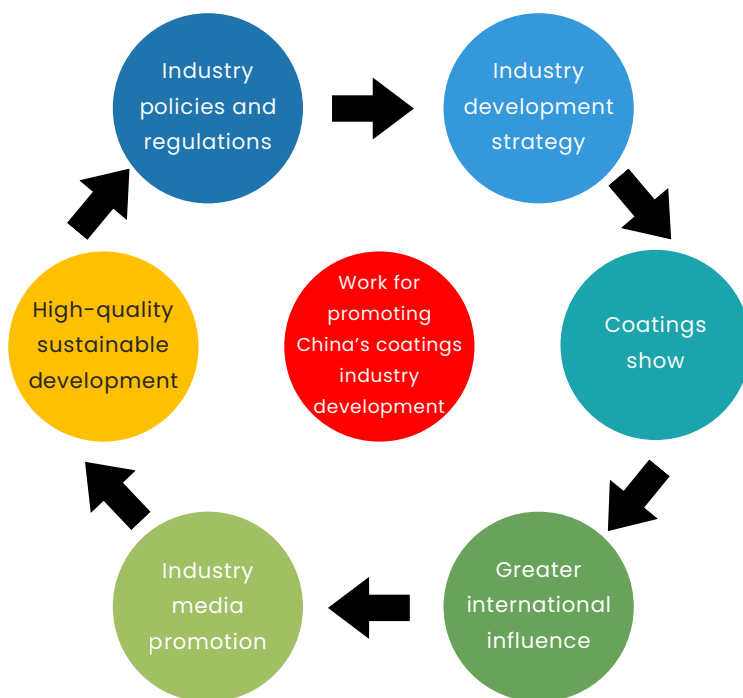


CNCIA's work for the industry

1. Pay attention to industry development, cope with key industry issues together with international colleagues in the industry

CNCIA pays attention to industry development continuously and has done a lot of work to serve the industry, government and society in the areas of policies and regulations, information analysis, talent cultivation, quality, safety and environmental protection.

For hot issues in the coatings industry, CNCIA joins hands with the international coatings industry to cope with issues such as VOCs, persistent organic pollutants, titanium dioxide risk assessment, lead elimination, microplastics and biocides.



2. Pay attention to green environmental protection and replacement of lead coatings

CNCIA has promoted replacement of lead coatings through participation in revising a number of policies and standards.

Lead limits in national standards have been revised to be basically in line with the international advanced level.

We coordinated with UNEP to formulate a technical guideline for lead-free coatings formulas and actively promoted lead-free coatings technology.

3. Promote low VOCs coatings

CNCIA through participation in revising China's Law on the-

prevention and Control of Atmospheric Pollution-definitely promotes low VOCs coatings at the national level.

Establishment of low VOCs coatings national standards and efforts to reduce emissions in downstream industrial painting at the source have contributed greatly to air quality improvement.

4. Formulate China Coatings Industry Sustainable Development Report

According to UN Sustainable Development Goals, CNCIA formulated China Coatings Industry Sustainable Development Report, actively encouraged outstanding enterprises in the industry to provide typical-

-cases of sustainable development, publicized them in the industry, and promoted typical sustainable development practices.

5. Actively participate in PFASs-related work

In view of public comments on EU's PFASs restriction proposal, CNCIA actively organized Chinese coatings enterprises' participation in submission of comments.

CNCIA agrees to WCC's preliminary opinion on EU's PFASs control

CNCIA is actively coordinating with China's Ministry of Ecology and Environment and participating in PFASs-related work.

6. Other key tasks of the coatings industry

CNCIA submitted a statement to the Chemical Review Committee of the Stockholm Convention and successfully obtained a five-year exemption period for UV328 ultraviolet absorber.

In view of the EU's inclusion of titanium dioxide into the list of Category 2 suspected carcinogenic substances, CNCIA organized the Chinese titanium dioxide industry's identification work and submission of opinions. The EU finally revoked this proposal.

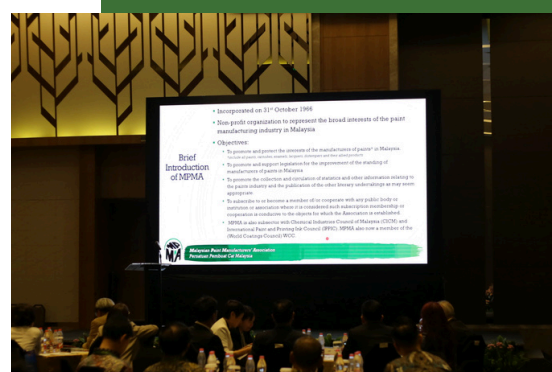
MALAYSIA PAINT MANUFACTURER ASSOCIATION (MPMA)

Intoduction of MPMA

- Incorporated on 31st October 1966.
- Non-profit organization to represent the broad interests of the paint manufacturing industry in Malaysia.
- Objectives:

The Malaysian Paints Manufacturing Association (MPMA) promotes and protects the interests of paint manufacturers, supports relevant legislation, and circulates industry statistics, while being a subsector of the Chemical Industries Council of Malaysia and a member of the World Coating Council.

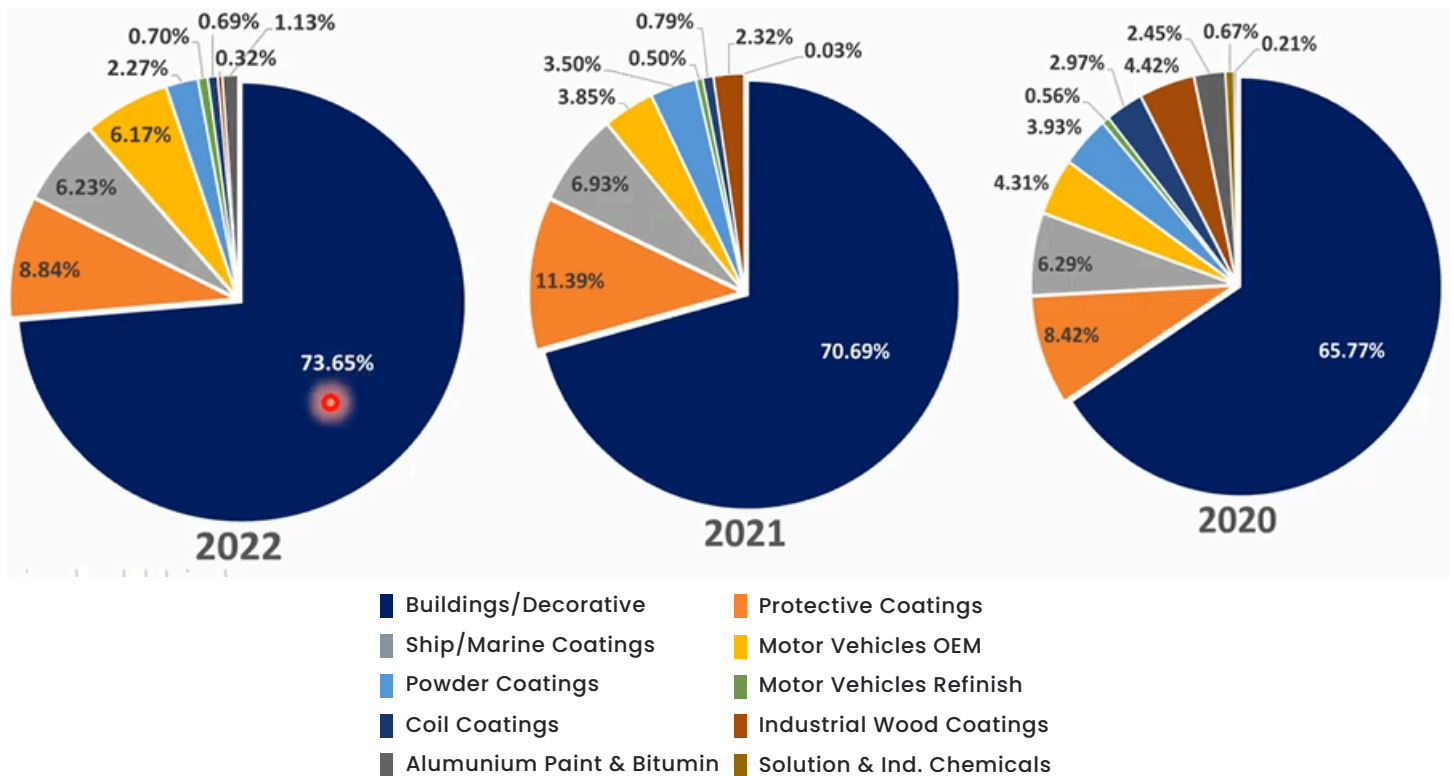
- We engaged 3rd Party- Crowe Malaysia to collect on behalf
 - Crowe sent out email to request for the-



Chee

- manufacturing volume data for year 2020 in Excel format together with thenon disclosure agreement ("NDA") ot each member.
- o 2021 still has some COVID movement and operating restrictions, this has posed some challenges for few companies not to participate ot provide full data.

Manufacturing Volume from 2020 - 2022



General issues to the Paint Industry 2022 & 2023, Malaysia

Shortage of foreign workers



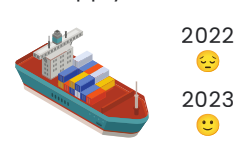
Inflation



RM prices



Supply Chain



Association updates:

- That the "Malaysian Paint Manufacturer's Association" (MPMA) has got the approval from Registrar of Society (ROS) to change its name to "Malaysian Paint & Coating Manufacturer's Association" (MPCMA)
- This is to majorly to be more reflective and inclusive in our industry. To be a single voice for the entire "value chain" of the paints & coatings industry in Malaysia.
- MPMA is in the process now of revising and design its new MPCMA logo.

PH PAINTS & COATINGS INDUSTRY ROAD TO SUSTAINABILITY

PHILIPPINE PAINT AND COATINGS
ASSOCIATION (PPCA)(FORMERLY PAPM)



Introduction

- Founded in 1961 (62 yrs)
- 77 Members, 26 Paint Manufacturers
- Member of Asian Paint Industry Council (APIC)
- Industry Initiatives:
 - Established 17 Paint Standards under BPS, a joint project with DTI
 - Fully compliant with DENR CCO on Lead and Lead Compounds
 - Partnership with Ecowaste on Lead Elimination Campaign (GAELP Subscription)



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Where do we stand in SUS today?

Compliance	Initiatives	Affiliations, Collaborations
Chemical Control Order for Lead <DENR AO 2013-024> Full implementation since 2016-Architectural Coatings 2019 - Industrial Coatings etc. GHS Labelling & SDS: Priority Chemicals (PCL)-2016 High Vol Toxic Chemical - 2017 Dangerous Goods (IATA, IMDG) - 2019 Mixtures (Paints inc.) - 2021	Responsible Care Program – thru chemical orgs, SPIK and ICCA KPIs: Health & Safety – Occupational, Transport/Process Environment • Self-Monitoring Report of Hazardous Wastes (RA 6969; DAO 2013-22) • Air Emissions inc. CO2 • Effluent Water Monitoring • Energy Use Sustainable Paints & Coatings Solutions to Market • Water-borne systems • Low VOC • POP elimination	SPIK – Samahan sa Pilipinas ng mga Industriyang Kimika (Chemical Association) Ecowaste Coalition – NGO under the umbrella of IPEN (Int'l Pollutants Elimination Network)



Key Challenges in SUS & Regulations

Regulation of Paints under Food & Drugs Administration – AO 2019-0019

- Huge cost/resources burden & risk for the Industry vs questionable benefit to preventing health & safety

HUHS/ Household Urban Hazardous Substances Definition:

- Any substance or mixture of substances
- intended for individuals or limited purposes
- and which is toxic, corrosive, an irritant, a strong sensitizer, is flammable or combustible, or generates pressure through decomposition, heat, or other means,
- such substance or mixture of substances may cause substantial injury or substantial illness during or as a proximate result of any customary or reasonably foreseeable ingestion by children

PMPIN – Pre-Manufacturing Pre-Importation Notification of Chemicals for listing in PICCS (Philippine Inventory of Chemical Substances)

- Bottleneck to provide toxicological/ecological data from manufacturers of chemical substances; No link between regulating agencies for existing data
- Confidential Business Information
- 100% declaration of components

Huge Efforts to Educate Downstream Market on Sustainable Products

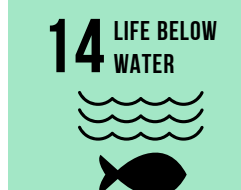
Cost sensitivity of Market – Roadblock to Exploring SUS Options

Outlook – Our Contributions to Global P&C Sustainable Goals

- Elimination of Toxic RMs (CMRs, Chemicals in Products)
- Bio-based raw materials
- Product standards
- Renewable energy source
- Process Optimization to reduce energy consumption
- Water and Wastewater Management
- Water neutrality, rain water collection
- Hazardous Waste Management
- Extended Producer Responsibility (EPR)
- Waste to energy – circular economy



pictures of participant



JAPANESE PAINT INDUSTRY UPDATE FOR ASIA PAINT INDUSTRY COUNCIL 2023

JAPAN PAINT MANUFACTURERS ASSOCIATION (JPMA)



About JPMA

- Established: April 23, 1948
- President: Yuichiro Wakatsuki
- Members: Regular member: 97 (Manufacturers, associations) Supporting members: 175 (Raw Material suppliers, distributors, etc).
- Our Mission
 - Research on the Industry, including environmental management and safety measures.
 - Set up and maintain domestic/international standards of product quality.
 - Research on the Industry, including environmental management and safety measures.
 - Set up and maintain domestic/international standards of product quality.
 - Collaborate with the World Coatings Council and the Asian Paint Industry Council on global issues.
 - Publish JPMA Standard Paint Colors.
 - Enhance industry-wide cooperation among paint manufactures, distributors and painting contractors.



Yoshiko Norizuki

Paint Market Trend

Production Volume

2020 FY Paint production volume was -8.8% over 2019 FY, due to the pandemic.

2021 FY Growth over 2020FY remained 2.6%, not reaching the expected pre-pandemic level.

Marked -3.4% from 2021 FY, resulting in zero-growth since the pandemic.

2022 FY Impact of pandemic followed by surging raw material price due to Russia-Ukraine war.

Sales Value

2020 FY Paint sales value was -7.9% over 2019 FY, following the trend of production volume.

JAPANESE PAINT INDUSTRY UPDATE FOR ASIA PAINT INDUSTRY COUNCIL 2023

2021 FY 5.8% increase over 2020 FY.

2021 FY 7.7% increase over 2021 FY, 4.9% increase over 2019 FY (pre-pandemic).
The paint price adjustments owing to the surge of raw material.

GDP Growth

It remained sluggish due to the Russia-Ukraine war overlapping the recovery from the pandemic.

Bank of Japan Short-term Industry Report

These factors lead to sluggish report for Japanese chemical after short recovery following the end of pandemic.

However, the latest report shows the sign of improvement. Expectations for future growth.

For the last three years, the paint industry is struggling with various factors that strains the recovery of the market. Keep monitoring for the recovery from these three years.

Raw Materials Price Surge

Transition of Raw Material Price

The mild surge of resource import price started in 2021 following the depreciation trend of JPY.

Then the price surge sharpened by the Russia-Ukraine war on Feb 24, especially for LNG.

Since the latter half of 2022, the import price is starting to decline.

Domestic Corporate Price Index

The paint index is increasing, following the increase of chemical product prices with a delay.

It shows the delay in price adjustment; however, as of 2023, the paint index has-

caught up with the chemical product index.

In conjunction with the surge in raw material prices, costs such as electricity and logistics have also surged, leading to an overall challenging situation.

The operating profit margins of JPMA member companies in 2021 FY further decreased from the previous year.

While the impact of rising raw material prices is significant, it's worth noting that the price adjustments may still be ongoing, so we should keep a close eye on the results for the next fiscal year, 2022.

Raw material cost ratio and operating profit margin

Obviously, Raw material cost ratio and operating profit margin inversely proportional.

Major Demand Sector Trends

- Buildings sector is recovering from pandemic depression, and there're growing expectations for increase in remodeling works.
- The automotives production is taking time to recover from the reduction due to the pandemic and shortage of semi-conductors. It's expected to recover in 2023.
- Industrial sector has long been adopting powder coatings specification as environmental friendly coating. Looking into shipping volume in 2021, powder coatings are levelled, water based are increasing.
- DIY, home use paints, have increased in 2021, exceeding the "Stay Home" demand in 2020.

Paint Industry Outlook

Outlook of the paint industry.

- Paint is well-suited tool (conviviality), effective for the society.
- It will be used continuously, but the market is shrinking.
- Tough challenges such as decarbonization and aging production facilities.
- At the same time, it could be a chance to review business strategies.
- Planning, R&D, Service will be crucial aspects.

JPMA Topics

JPMA Activities

-  Formaldehyde Voluntary Registration
-  Fire-retardant paints
-  Organo-tin free AF Systems
-  Cool roof paints labelling
-  Antibacterial / antivirus Product Management Guideline
-  DIY paints list

- The Japanese paint market is expecting to see improvement shipment decline in 2020 FY due to the pandemic in 2020.
- Price adjustment of paint products followed the surge of raw material price, but the business profit has decreased.
- Add values to paint industry. Focus on areas such as R&D, planning, branding, sales and service, materials of related industry, diversifying products, improve business efficiency, etc.
- JPMA will keep coordinating activities to support our members, and improve communication with the consumers, through various programs and cooperation with WCC and APIC.

About WWRC

- Founded in 1980, WWRC aims to be a global leader in providing chemical solutions for industries such as Coating, Construction, Plastics, Food, Personal Care, and many others.
- Today, WWRC has 10 offices across East Asia and serves over 100 brands.
- We develop effective chemical solutions for our partners through innovative thinking, industrial experience and deep knowledge of industry practices.
- Through our work, we strive to improve human life.



Nama



Our Vision

We Improve Everything for Everyone



Our Mission

To be a Global Leader in chemical solutions: Innovative & Respected



Our Core values

Competence, Innovativeness, Credibility

2022 ICIS Top 100 Chemical Distributor Ranking

WWRC Holding was listed in ICIS Top 100 Asia Pacific chemical distribution leaders

2022 Group Turnover was approx. USD 230 million with 270 employees.

Value Proposition

By leveraging our experience and network, we are uniquely positioned to identify our client's needs and propose relevant solutions.

WWRC leverages our network and technical labs to provide various solutions to our customers Distribution & Logistics

- 1 WWRC has access to extensive network of suppliers.
- 2 Regional logistics network provide a holistic regional solution to our customers.
- 3 Our technical labs are able to create highly individualized new formulations
- 4 Provision of best-in-class after sales service to our customers.

Sourcing

- WWRC helps businesses source for suitable chemicals and ingredients for their needs.
- We work closely with partners to understand their product development and application requirements – ensuring optimum chemical performance.

- This means that we not only help you source for products, but also provide technical and specialized assistance.

Distribution & Logistics

- Situated on a key strategic location in Port Klang, Malaysia
- Logistic Hub situated on 28 Acres (113,312 sqm) of Land with bonded warehouse, bulk storage, e-commerce fulfilment, distribution, freight, forwarding and shipping services



Photos of Logistic Hub in Port Klang

- Provider of warehousing for clients in a variety of industries – oil & gas, chemicals, retail, manufacturing, etc
- Work closely with clients to provide logistical solutions

Technical Capabilities

- 5 Technical Labs (3 Coating and 2 Personal Care Lab) in Malaysia, Indonesia and Taiwan
- Provides pre and post sales Technical Support to our customers
- Provides formulation origination services to our customers

Industries that we serve

Industrial Chemical
1.Coatings & Ink
2.Plastics & Rubber
3.Construction
4.Adhesives
5.Intermediates
Others (Textile, Lubricants, Electronics)

Life Science
1.Food Ingredients
2.Personal Care & Cosmetics
3.Animal Feed
4.Pharmaceutical

Coating/Construction/Ink/Adhesives

Key Suppliers



Plastics & Rubber

Key Suppliers

**Polymers and Polyurethanes**

Key Suppliers

**Polymers and Polyurethanes**

Key Suppliers

**VIETNAM COATING INDUSTRY 2023****VIETNAM PAINT AND PRINTING INK ASSOCIATION (VPIA)****VIETNAM MACROECONOMIC INDICATORS – 2023**

- Total population : 99.855 millions
- Agriculture – Forestry – Fishery : 3,43 %
- Industrial & Construction : 2,41 %
- Services : 6.32 %
- CPI : 3.16 %
- Due to weak external demand and a growth rate of only 0.4% in the manufacturing and processing sector.
- PMI for manufacturing and processing has been below 50 points since March 2023, with many businesses having to close.
- Industrial production has been affected by power outages in the northern region and difficulties in the real estate sector.
- However, the recovery of domestic tourism has boosted consumption, with retail sales in the first half of 2023 increasing by 11% compared to the same period the previous year.



pictures of participant



Nama

Vietnam Coatings Industry – 2023

- Total population : 99.855 millions
- Agriculture – Forestry – Fishery : 3,43 %
- Industrial & Construction : 2,41 %
- Services : 6.32 %
- CPI : 3.16 %



pictures of participant

THAI PAINT MANUFACTURER ASSOCIATION (TPMA)

PRESIDENT OF TPMA

Profile

- Established on 12 June 2000
- Members are comprise of all kinds of paint manufacturers in Thailand
- Associates members are chemical suppliers and paint packaging manufacturers

Vision

- Good governance operation
- Promote and support the paint industry in terms of business sustainability and competitiveness

Mission

- Collect and update the database of the Paint Industry in Thailand
- Good cooperation and cooperatively working with the government in considering new policy that may impact the paint industry
- A active member of the APIC (Asian Paint Industry Council)
- Organize activities to update new business environment to members and strengthen alliance among members
- Collaboratively engage in social responsibility activities
- Promote positive image of the paint industry to the public

99 TPMA MEMBERS

43 ORDINARY MEMBERS

Manufacturers of paints for the industry, building and other coatings industry

- Thinner manufacturer for mixing colors and coatings



Yoshiko Norizuki

56 ASSOCIATED MEMBERS ;

Manufacturers and distributors of chemicals , packaging, etc for paint manufacturers

TPMA 2023 ACTIVITIES

ANNUAL GENERAL MEETING & DINNER



SEMINAR FROM THAI CHAMBER OF COMMERCE

SPECIAL SEMINAR FROM THE FEDERATION OF THAI INDUSTRIES (FTI)



SEMINAR FROM THAI CHAMBER OF COMMERCE

ANNUAL SEMINAR THAI CHAMBER OF COMMERCE



SEMINAR FROM THAI CHAMBER OF COMMERCE

Challenges of Coatings & inks

Challenges

- Price of imported products are cheaper than local made.
- Additional cost to new regulations compliance.
- Short of supplies of many chemical raw materials.
- FTA agreement

Response

- Alliance with key customers
- Bio Base inks & coatings.
- Diversify to other biz
- M & A
- Exit

STRATEGY AND PRACTICE OF TAIWAN PAINT INDUSTRY IN CARBON REDUCTION

TAIWAN PAINT INDUSTRY ASSOCIATION

Profile

- Location: Taipei, Taiwan
- Establish: 1952
- Members: 152 (2023)
- Sectors: Architectural coatings, industrial coatings, wood coatings, marine and protective coatings, automotive coatings.
- Mission:
 - Promotes technology-related laws, regulations and trainings.
 - Research and advise related government policies and industrial laws.
 - The Laboratory, established in 1982, performs inspections and tests according to CNS, JIS, ASTM, ISO, DIN, and other standards.
 - The Laboratory has been recognized as a "CNS Mark Products Approval Laboratory", and also certificated laboratory by TAF as a "ISO/IEC 17025 " in Taiwan. Approval items by TAF up to 105 items
- Goal: Seek and establish relative industries technology exchanges. Not only to assist members to upgrade their technology but also to increase and explore market opportunities.



Chung-Hsuan Chen

Paint Industry Market Updates (Compared to 2021)

- Total sales volume dropped by 24,417 tons in 2022. (Decreased 5.7%)
- Total sales increased by \$70M USD in 2022. (Increased 6.5%)

STRATEGY AND PRACTICE OF TAIWAN PAINT INDUSTRY IN CARBON REDUCTION

- Average price increased from \$2.50 USD per Kg to 2.82 USD per Kg compared to 2021. (Increased 12.8%)
- Market trends still focus on Energy-saving and environmental-friendly, lower emission, low VOCs and renewable/bio-based coatings.

Emission Control

- Since 1992, Taiwan EPA (Environmental Protection Administration) has been surveillance and compile emission data of all known source of pollution base on TEDS(Taiwan Emission Data System)
- Base on TEDS 12.0 (which is based on 2020-2021 Data) VOCs emission from Paint & Coatings is 81,285 tons a year.
- Approximately 21.8% of total stationary emission source.

Paint Industry Market Segments

- Decorative Coatings are majorly water-based (VOCs standard: Not to exceed 50 g/L for interior walls and ceiling (60°gloss $\leq$ 25); Not to exceed 100 g/L for interior walls and ceiling (60°gloss > 25); Not to exceed 100 g/L for exterior walls)
- Construction/Protective Coatings are mainly high-solids
- However, transportation (Auto OEM/Refinish, Motorcycle/Scooters), general Industrial, and other coatings are >90% solvent-based, contribute ~1/5 VOCs emission

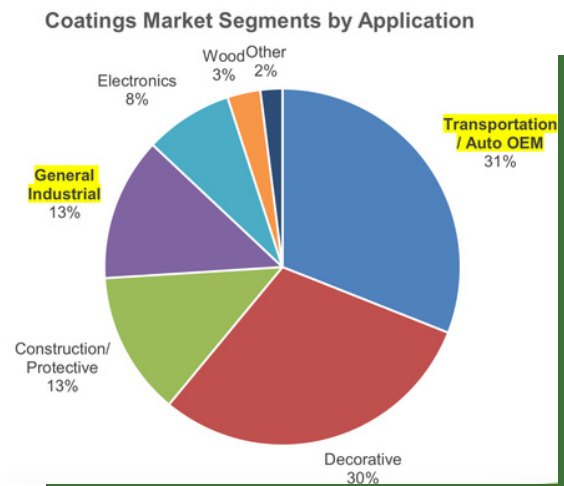


Diagram of Coating Market segment by application

Strategy to Meet Carbon Reduction Requirement

- In the past five years, Taiwan's motorcycle production volume is approximately 1.1 M/yr, and the output value is approximately NT\$63 billion.
- The use of high-carbon-emission solvent-based coatings on Taiwan motorcycles causes 11,000 tons of CO₂e/yr.
- The carbon footprint of manufacturing and production in the transportation industry shows that coating process accounts for >50% carbon footprint. (Ref. Manufacturing Driving Circular Economy, 490, 2023)
- Our goal is to replace solvent-based with water-based coatings, with an estimated 10% replacement rate by 2025, carbon emissions will reduce by approximately 1,215 tons of CO₂e/yr.

Production Line Trials and Implementation

Application Area by Spray

- Stainless Steel for hangers
- Plastic tubes

Saving Energy/Cost

- Lower Baking Temperature, Waterborne baking enamel (100-130°C < Solvent-based 150-180 °C)
- Atmosphere VOCs Emissions, reduce extra 40-50% solvent usage in thinning and cleaning
- Less activated carbon adsorber usage
- Less RTO (regenerative thermal oxidizer) energy cost
- Safer Storage and User-Friendly



Pictures of MC

BANGLADESH PAINT MANUFACTURERS' ASSOCIATION

Profile

- Bangladesh Paints Manufacturers' Association is the organization of the producers of Paints. The name itself implies that it is the organization of the Paint manufacturers to ameliorate or resolving problems faced not only by its members but by the paint industry as a whole.
- Registration # T.O. /113178 of 1978-79 dated 31-08-1978 under the companies Act 1913 with the Registrar of Joint Stock Companies, Dhaka.
- BPMA MAIN FOUNDAR
 - Mr. Serajuddin Ahmed – Managing Director of Elite Chemical Industries Ltd.
 - Mr. T. Karim – Managing Director of Al-Karim Paint



Yoshiko Norizuki

INITIAL MEMBERS – 1978-1979

- | | |
|-----------------------------------|---|
| • Elite Chemical Industries Ltd., | • Industrial Chemical & Allied Company Ltd. |
| • Jenson & Nicholsons (Bd) Ltd. | • Al-Karim Paints & Chemical company Ltd. |
| • Buxly Paints Ltd | • Paradise Paints Ltd. |
| • Galaxy Paints & Chemicals | • Ronny Chemical & Allied Company Ltd |

Our promises

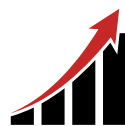
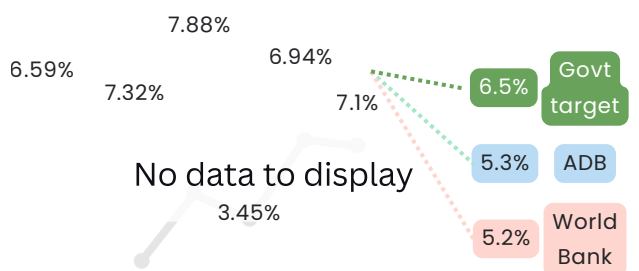
- Bangladesh Paints Manufacturer's Association (BPMA) is not for profit making body representing the paints manufacturers & suppliers of Bangladesh. We are the voice of paints companies providing representation to National & International level.
- The Association seeks to advance, encourage and recognize the highest standard of paints, We do this by providing our members and consumers with up-to-date information on a regular basis and also through our Awards for Excellence which is held annually at our AGM.
- All members of BPMA has a range of resources available to them by way of magazines, e-bulletins, industry consultants, updates resources, accredited and certified courses conducted by various Govt. & Non Govt. organizations. BPMA is a Member of FBCCI & Asian Paints Industry Council (APIC), recently BPMA has started working with BSTI, CISC & ESDO to protect & as a safe guard to all concern.

Core KEY Activities of BPMA

- Arrange Training to build up professional & Skilled.
- Provide Technical Support.- To use Lead Free Pigments and driers in Paints.
- Provide Information about Local Market.
- Provide Information about Raw Material Sources.
- Maintain Relationship with Govt. Authority to develop this sector.
- Maintain Relationship With Others Authority to develop the product quality and meet the social demands.
- To give assistance for product Pricing in local market.
- To maintain the good relationship with in members such as not to do the unethical Promotional activities practice in the market.
- Strictly maintaining Paints Specification as per BSTI Specification.

Bangladesh GDP growth rate Projection

Real GDP Growth Rate



in FY24, World Bank forecast 6.2% and ADB 6.5% economic growth for Bangladesh

Both the lenders expect average inflation to rise to 8.6% – 8.7% this fiscal year

Govt revised inflation target 7.5% For FY23

Data from Bangladesh Bureau of
Statistic Base year: 2015 – 2016

Forecast
and target

Unrealistic assumptions, illusive targets

	FY22 Actual	FY23 Budget	FY23 Revised Budget	FY24 Projection
GDP Growth (%)	7.1	7.5	6.0	7.5
Gross Investment (& of GDP)	32.0	31.5	27.8	33.8
Private Investment (& of GDP)	24.5	24.8	21.8	27.4
Public Investment (& of GDP)	7.5	6.7	6.0	6.3
Inflation (%)	6.2	5.6	7.5	6.0



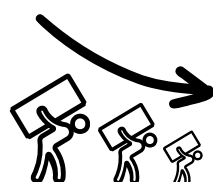
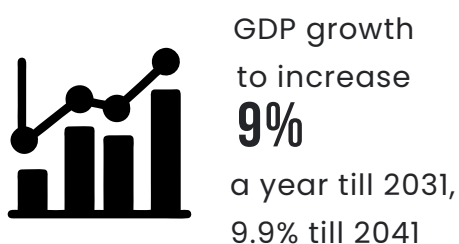
Bangladesh Demonstrates Strong Economic Growth Drivers

- Strong vitals throughout the pandemic and global unrest show economic resilience
- A growing middle and affluent class (MAC) population and a young demographic driving the workforce
- Aspiring factors futureproofing the country prospects

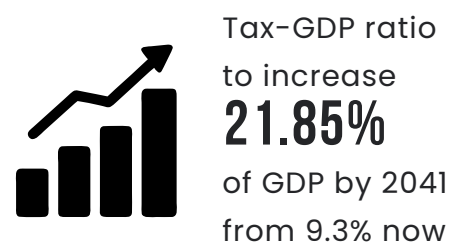
Bangladesh economy ranks 35th in world, 2nd in South Asia

Bangladesh Macro Economic Trend & Goals To Achieve For 2041

New Goals to Achieve



Moderate poverty rate to decline to **9.9%** of GDP by 2041 from 9.3% now



Investments rise to **46.88%** of GDP by 2041 from 31.56% now

Why invest in Bangladesh?

- Predicted to be 9th largest consumer market globally by 2030
- 34M people in the middle income and affluent class
- Access to large domestic market
- Strategic location to access to large regional markets including-
 - India and China
- Strong cost competitiveness as investors can save
 - 47% - 84% in workers wages
 - 41% - 69% in managers salaries
 - Up to 55% in electricity bills
 - Up to 89% in water cost

Key points for investment & industrial development

- Industrious low cost workforce
- Strategic location, regional connectivity and worldwide access
- Strong local market growth
- Low cost energy
- Proven export competitiveness
- Competitive incentives, tax holiday
- Export & economy zones
- Bangladesh is the bridge between Asian & Saarc nations
- Bangladesh ensures adequate protection of intellectual property rights such as patents, design, trademarks and copyrights

Paints Market size in Bangladesh

Report Summary:

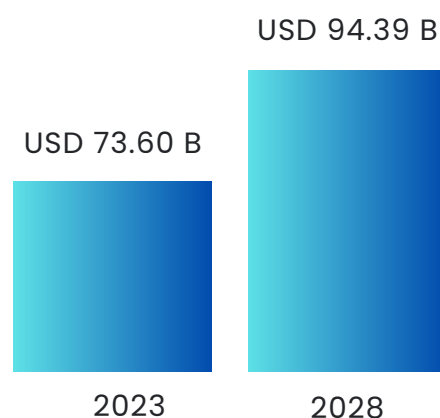
Report Attribute Details

Market Size (2023)	USD 73.60 billion
Market Size (2028)	USD 94.38 billion
CAGR (2023-2028)	5.10%
Study Period	2018-2028
Forecast Units	Value (USD billion)
Report Scope	Market Dynamics, Revenue Forecast and Segmentation, Competitive Landscape and Recent Developments, Market Growth, Future Opportunities, and Trends
Key Market Drivers	Growth in the construction industry.

Rising demand for protective coatings.

Asia-Pacific Paints and Coatings Market

Market Size in USD Billion CAGR 5.10%



Source: Mordor Intelligence

Challenges in Paints market

- 99% Raw Materials are imported.
- Major Challenging of Raw material price is increased due to dollar inflation.
- LC limitation For Dollar crises.
- Govt. maintaining strict regulation and implementing new rules for DG materials which is hampering to import DG materials.
- Import cost is increased due to abnormalities of Port activities. Which is impacted in production cost about 10% increased.
- Bangladesh Health sector and NGOs are working on Lead and heavy metal Free paints.
- Duty & Taxes (SD-5% & vat 15%) is higher because of Paints & Primers is still counting as luxury products.
- Enroll regulation on Import of DG materials, Explosive solvents, Biocides and chemicals.

Achievements

- With the collaboration of BSTI Paints Specification Set up for Bangladesh which is mandatory to maintain for marketing in local market.
- Lead Pigments & Additives is omitted from Decorative Paints.
- With collaboration with UNICEF and ESDO, BPMA has given some proposal to Govt. to give some incentive and reduce duty for lead free Raw materials.
- With the help of ICT, paints manufacturers are educating the market to introduce Green Products, Low VOC Products, No added Lead and heavy metals, Formalin free, APEO free products.
- Providing selective products as per customer demand.
- Adopting new technology and technical know how arranging technical seminar with the collaboration of Raw material suppliers.

TYNOX INTERNATIONAL

Profile

Specialized In Titanium Dioxide&Opacity Technology

OUR VISION

"To be an integrated innovative chemical solutions provider, market driven, customer focus operational excellence with a sustainability culture".



Eve Lim (Tynox)

OUR MISSION

Empowering as an Opacity Innovation Solution Partner to enhance customer profitability through cost optimization and elevate product quality

ABOUT US

- Tynox International Sdn Bhd is a specialized company with extensive expertise in developing, manufacturing, marketing and distributing a diverse range of chemical products, such as titanium dioxide, opacity technology, etc.
- Over the years, we have built a strong track record in consistently producing high-quality products. Numerous multinational embraced, acknowledged incorporated operations. Our our companies and products offerings have consistently into have their garnered widespread recognition and acceptance in the industry, making them a preferred choice for the global enterprises.
- With our deep-rooted experience in the chemical industry, Tynox International Sdn Bhd has successfully established ourself across numerous countries in south east asia, asia pacific, middle east, africa and other regions.

GROUP OF COMPANIES



WHAT WE DO

- | | |
|--|---|
| <p>1 RESEARCH
Understand market needs</p> | <p>4 MANAGEMENT
Adminstration service</p> |
| <p>2 PRODUCTION
Produce consistance
quality product</p> | <p>5 LOGISTIC
Shipment & warehouse</p> |
| <p>3 PROMOTION
Presentation & event</p> | <p>6 AFTER SALES SERVICE
Technical support</p> |

MELANGKAH DENGAN KEBERLANJUTAN: PT CITRA WARNA ABADI MERAHAI SERTIFIKAT DAN PENGHARGAAN INDUSTRI HIJAU



PT CITRA WARNA ABADI)



Penyerahan Penghargaan Industri Hijau kategori Kinerja Terbaik oleh Kementerian Perindustrian di Jakarta (Dokumen PT Citra Warna Abadi)

PT Citra Warna Abadi merupakan perusahaan nasional produsen cat dan bahan pelapis yang berlokasi di Kabupaten Sukoharjo Provinsi Jawa Tengah. Pada tahun 2022, kami berhasil memperoleh Sertifikat Industri Hijau sebagai perusahaan yang dalam proses produksinya telah menerapkan praktik-praktik industri berkelanjutan dan memenuhi Standar Industri Hijau (SIH) sesuai aturan Kementerian Perindustrian Republik Indonesia No. SIH 20221.1: 2019. Sertifikasi ini berhasil kami peroleh atas kerja keras dan dukungan seluruh departemen dan karyawan PT Citra Warna Abadi dalam pemenuhan persyaratan dan kriteria standar industri hijau yang mencakup aspek teknis dan aspek manajemen.



Sertifikat Industri Hijau PT Citra Warna Abadi 2022 (Dokumen PT Citra Warna Abadi)

More Info:



021-5742-383



www.apci.info



sekretariat@apci.info

MELANGKAH DENGAN KEBERLANJUTAN: PT CITRA WARNA ABADI MERAIH SERTIFIKAT DAN PENGHARGAAN INDUSTRI HIJAU

Aspek teknis praktik keberlanjutan dalam standar industri hijau meliputi efisiensi energi, pengelolaan limbah, penggunaan bahan baku ramah lingkungan, proses produksi yang ramah lingkungan, pengurangan emisi dan polusi, kualitas, kesehatan dan keamanan produk, pemantauan dan pelaporan kinerja serta inovasi teknologi. Persyaratan-persyaratan teknis yang telah kami penuhi antara lain: kriteria sumber dan spesifikasi bahan baku utama, bahan tambahan serta penanganannya yang tercantum dalam Material Safety Data Sheet (MSDS), pemakaian air tanah untuk pencucian tangka serta kegiatan utilitas, rasio produk terhadap pemakaian bahan baku, kriteria konsumsi energi listrik maksimal, kriteria emisi CO2 ekuivalen maksimal, kinerja peralatan yang dinyatakan dalam Overall Equipment Effectiveness (OEE), dan kemasan produk sesuai standar Permenperin No.87/M-IND/PER/9/2009. Adapun untuk pengelolaan limbah, PT Citra Warna Abadi memiliki IPAL (Instalasi Pengolahan Air Limbah), TPS B3, pengelolaan limbah padat dan tersedianya SOP terkait penanganan limbah.

Untuk memenuhi persyaratan manajemen, kami memiliki kebijakan serta prosedur dalam penerapan praktik industri berkelanjutan sesuai prinsip-prinsip industri hijau dan melaksanakan sosialisasi terkait kebijakan-kebijakan tersebut.-

-Kami berkomitmen penuh dalam pengembangan kebijakan terkait manajemen lingkungan, energi, bahan baku dan persediaan, inovasi dan teknologi, transportasi dan logistik, kualitas dan kesehatan kerja, kinerja keberlanjutan serta manajemen risiko dan kepatuhan terhadap regulasi. Praktik dalam upaya memastikan aspek keamanan, kesehatan, dan keselamatan kerja telah kami lakukan dengan mengadakan pelatihan tenaga kerja, pemeriksaan kesehatan, pemantauan lingkungan tempat kerja, serta penyediaan alat P3K dan alat pelindung diri. Komitmen kami terhadap kesejahteraan lingkungan dan masyarakat kami wujudkan melalui program-program Corporate Social Responsibility (CSR) yang berkelanjutan seperti pengecatan pagar kelurahan dan area publik, melakukan kerjasama dengan instansi-instansi pendidikan, pemberian beasiswa, pembagian daging qurban dan sebagainya.

PT Citra Warna Abadi menetapkan tujuan dan sasaran yang terukur dari kebijakan penerapan prinsip industri hijau dan memiliki rencana strategis untuk mencapai tujuan dan sasaran tersebut. Kami melaksanakan program-program sesuai jadwal, menjalankan fungsi pengawasan dan pemantauan,-

MELANGKAH DENGAN KEBERLANJUTAN: PT CITRA WARNA ABADI MERAIH SERTIFIKAT DAN PENGHARGAAN INDUSTRI HIJAU

-serta melakukan tinjauan manajemen dan pelaporan secara berkala.

Selain terpenuhinya persyaratan-persyaratan teknis dan manajemen, untuk berhasil meraih sertifikasi industri hijau, kami juga harus melalui proses audit industri hijau. Proses audit ini dilakukan untuk mengevaluasi dan memverifikasi tentang kecukupan atau kelengkapan dokumen, kesesuaian lapangan, evaluasi kepatuhan serta audit surveilans. Audit surveilans dilakukan secara berkala setelah PT Citra Warna Abadi memperoleh sertifikat industri hijau untuk memastikan bahwa kami terus mematuhi persyaratan standar dan regulasi yang berlaku sejak audit awal dilakukan.

Atas semua upaya dan proses tersebut, selain memperoleh Sertifikat Industri Hijau, PT Citra Warna Abadi juga berhasil meraih penghargaan Industri Hijau untuk kategori Kinerja Terbaik 2022 dari Kementerian Perindustrian.



Penghargaan Industri Hijau Kategori Kinerja Terbaik 2022 dari
Kementerian Perindustrian (Dokumen PT Citra Warna Abadi)

Penerapan industri hijau membawa banyak manfaat bagi PT Citra Warna Abadi. Praktik-praktik keberlanjutan dalam industri hijau dapat menciptakan lingkungan kerja yang lebih sehat dan aman bagi karyawan sehingga berdampak positif bagi kinerja dan produktivitas SDM dalam perusahaan. Selain itu, industri hijau juga dapat meningkatkan reputasi dan citra yang baik kepada konsumen, mitra bisnis dan investor, meningkatkan efisiensi air, energi dan bahan baku yang akan berpengaruh pada efisiensi biaya operasional, meningkatkan kualitas dan image produk untuk diekspor ke negara-negara yang peduli lingkungan, pengakuan dalam pasar modal serta kemudahan dalam pengadaan barang pemerintah.

MELANGKAH DENGAN KEBERLANJUTAN: PT CITRA WARNA ABADI MERAIH SERTIFIKAT DAN PENGHARGAAN INDUSTRI HIJAU

Menjadi bagian dari industri hijau merupakan sebuah kebanggaan bagi PT Citra Warna Abadi dimana kami dapat berkontribusi pada pembangunan ekonomi dan sosial yang berkelanjutan, menciptakan lapangan kerja yang berkelanjutan dan memberikan dampak positif terhadap komunitas lokal. Komitmen kami tidak hanya untuk terus meningkatkan dan mengintegrasikan praktik-praktik berkelanjutan dalam semua aspek bisnis, tetapi juga untuk terus berinovasi dan berkolaborasi dengan semua pihak untuk membangun kesadaran akan pentingnya keberlanjutan dalam industri dan masyarakat secara keseluruhan.