

Next Generation of the Eco-Friendly Special Paints

- Energy Saving and Carbon Neutrality-

EUCNC (Energy Up CNC)



INNOBIZ
기술혁신형중소기업



Leading environmental preservation for next generations

EUCNC, as leading the eco-friendly special paint company, has developed innovative technology that can reduce energy consumption and carbon-emissions, and is manufacturing the special paint that has both heat-Isolation and heat-shield paints.

Opening up the eco-friendly energy-saving & carbon reduction paints market with global companies.

We are leading the eco-friendly special paint market through the energy saving & carbon reduction technology and co-working with the global partner based on the technology and trust.



Making the Social Value with eco-friendly energy-saving and carbon reduction technologies and products.

We are keep trying to develop the eco-friendly paint technology with social responsibility. As providing the energy saving & carbon reduction paints, we have effectively covered the seasonal energy demand due to changing weather and tried to minimize air pollution caused by carbon- emission.



Company Information

EUCNC : Energy Up CNC

Company Profile

- ◆ Company Name : Energy Up CNC (EUCNC), Corporation
- ◆ Has been founded at early 2019
- ◆ President, CEO Mr. Choi, JangSik
- ◆ Manufacturing and Sale for special paints
- ◆ KEITI Government R&D Complex at Incheon, Korea, Republic of
- ◆ Revenue (2022) \$2,540,000 (\$1.00=1,300 Korea Won)



Product & Technology

Heat-Isolation & Heat-Shield Paint

Product Info.

Eco-friendly Water Based Special Paint



Sunlight(NIR range) reflection



Prevent for heat loss with heat-isolation



Reducing Heating & Cooling Energy
Reduction Carbon Emission

◆ In & outside any building for the 1st target as construction materials

Heat-Isolation & Heat-Shield Paint

- ◆ Heat-isolation & heat-shield work simultaneously at once
- ◆ Energy saving & reduction of Carbon Emission up to 25% per year
- ◆ Cost saving by simply coating process (no need for primer)
- ◆ Make control for each function as the customer needs
- ◆ Water based eco-friendly paint

Product Effects

Saved Energy Cost & Carbon Reduction

Advantages: Saving Energy (49.5% ↓)

① High Reflection Rate : 94.4% (Sunlight with NIR)

Heat-Shield Effect

(Summer Season)



- ① Increasing the indoor shield effect from sunlight
→ down to 25~35 °C (vs. wo paint)
- ② Surface of roof & building temp. down
→ prevent room temp. going up

② Low Temp. Conductivity: 0.041 w/mk (@ thickness $300 \pm 50 \mu\text{m}$)

Heat-Isolation Effect

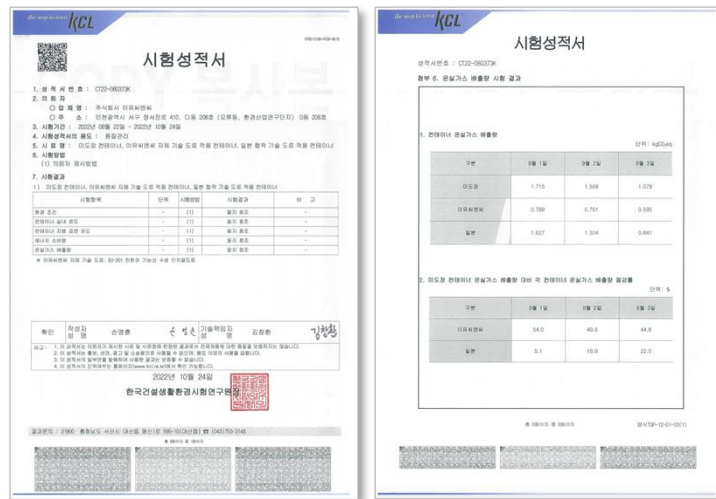
(Winter Season)



- ① Confirm with heat-isolation effect at inside building by low temp. conductivity
→ keep warm effect up to 6~8 °C higher than wo paint

Product Effects

Official certification of Carbon Emission by KCL



► Total Carbon Emission at Test Container (Unit: kgCO₂eq)

Index	Sep.1 st	Sep.2 nd	Sep.3 th
No Paint	1.715	1.568	1.078
Own Paint	0.789	0.791	0.595
Japanese Paint	1.627	1.304	0.841

► Reduction Rate [unit %, compare with the No Paint Container]

Index	Sep.1 st	Sep.2 nd	Sep.3 th
Own Paint	54.0	49.6	44.8
Japanese Paint	5.1	16.9	22.0



Test Facility (small containers)

Highest Level of Reduction Rate for the Greenhouse gas emission (Approximately 50%)

Product Effects

Simply Painting Process & Saved Labor Cost

Advantages: Less working time and Saving money

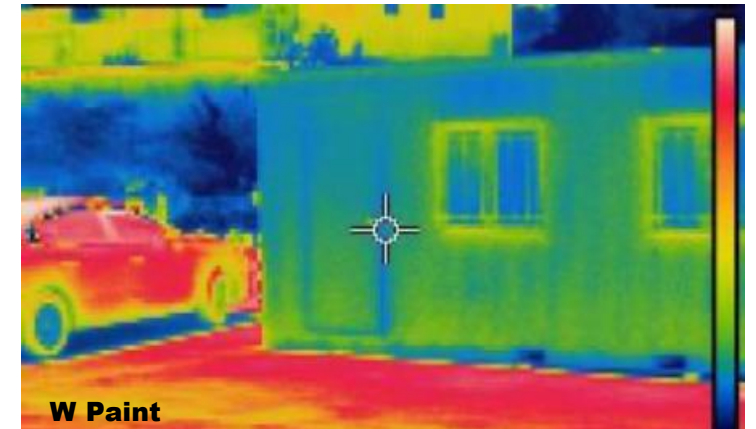
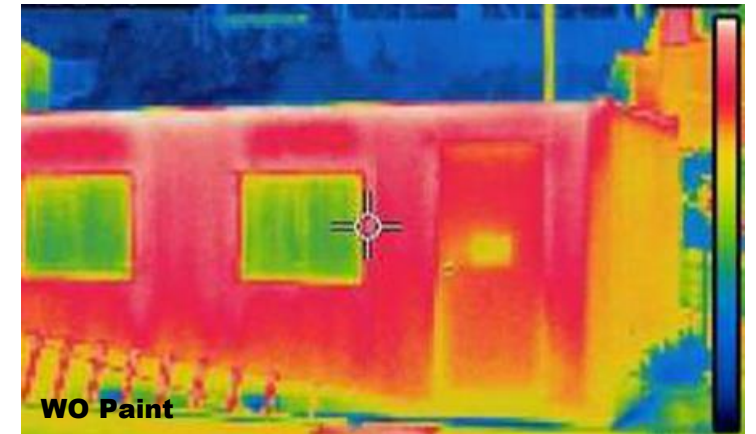
	Other Paints	EUCNC Paints
Working Process	3-steps working process Primer, Middle & Top Coating	Surface treatment & top coating (350um thickness) Green Technology in Korea※
Working Time & Cost	Working cost 100 Working time 100	Working cost 50 (50% ↓) Working time 40 (60% ↓)
Target Materials	Various paints for each target material	concrete, cement mortar, wood, plaster board, steel, aluminum, zinc plate etc.

※ We have got the ‘Certification for Green Technology*’& Patent**
 * Green Technology: Paint production technology that does not require primer & middle layer coating
 ** Patent: Heat Shield and Insulation paint composition requiring no primer and no surfacer

Temp. difference in Small Container

Heat Insulation effect → 7~8 °C

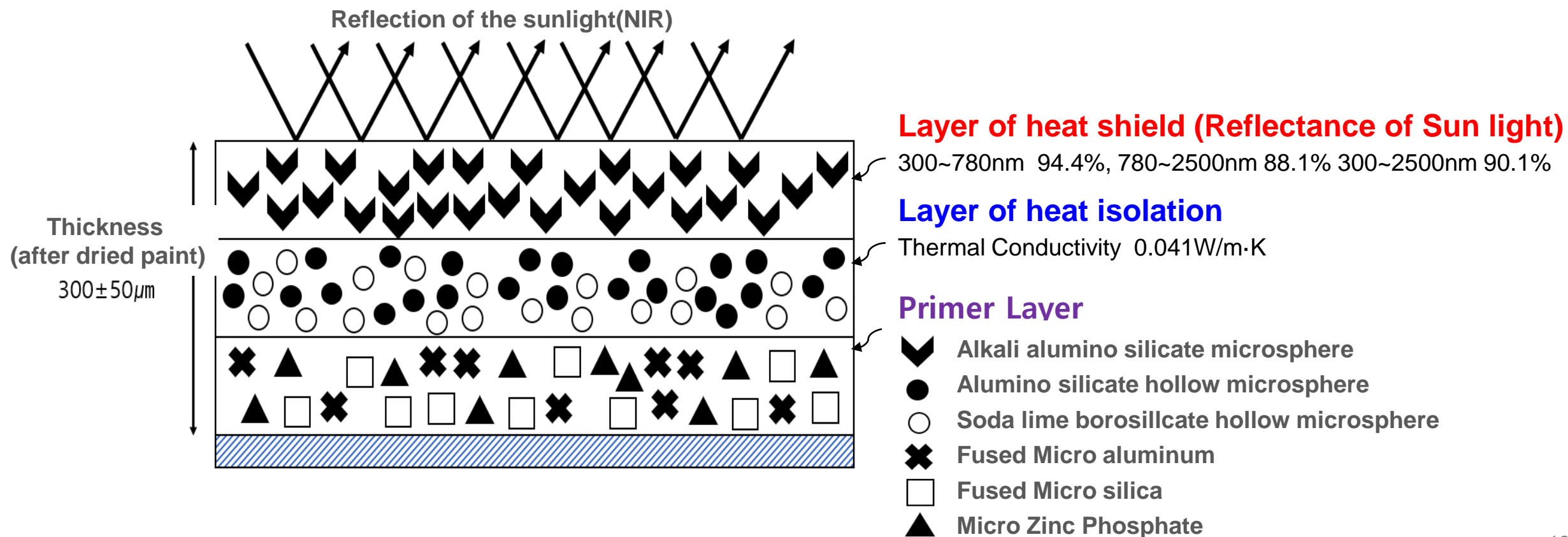
Heat Shield effect → 8~13 °C



Technology for Product

Automatically formed with three different layers

(Patent No. 10-2311501, Composition of the heat-isolation & heat shield paint in Korea)



Compare to the each paint characteristics

	Domestic Competitors		Global Competitors			 EUCNC
	 ONSAEMIRO (Japanese Co-Technology)	 DUONENERGYONE (Japanese Co-Technology)	 KORUND	 INSULADD	 GAINA	
Temp. Difference (at 35°C at outside)	5~7▽	5~7▽	-	-	-	8~13▽
Temp. Difference (at -5°C at outside)	-	-	5~6△	4~5△	3~4△	5~6△
Dried Paint Thickness (mm)	0.9~1.0	0.3	3	0.3	0.3	0.3
Applied Quantity (Liter/m ²)	1.1	0.4	1	0.7	0.4	0.35
Applied Area (m ² /Liter)	0.9	2.5	1	1.4	2.5	3.3
Heat-Isolation / Heat-Shield	△	△	△	△	X	○
Fire Resistance	X	X	△	○	-	○
Sound Insulation	○	△	○	△	△	○ (8~10dB Lower)
Durability	○ (Max. 5 years)	○ (Max. 5 years)	○ (Max. 5 years)	○ (Max. 5 years)	△ (Max. 3 years)	○ (Max. 10 years)
Processability	△ (3 times)	X (3 and more times)	X (3 and more times)	△ (3 times)	X (3 and more times)	○ (1 or 2 times)
Anti Corrosiveness	△	△	○	△	△	○
Need Primer	Need	Need	Need	Need	Need	No Need

Product's Competitiveness

Solve the three different issues

Environment

**Saving Fossil Energy
Carbon Neutrality**



**Save
Earth**

Economy

**Simple Process
1~2 steps
Less working time**



**Saving
Money**

Technology

**Easy to add functions
- Next target for
fire extinguishing
& Non-flammable Paints -**



**Technology
Development**

에쓰오일, 탄소저감 친환경 페인트 기술 업체 '이유씨엔씨' 투자 계약

동아닷컴 김민범 기자

입력 2023-03-23 21:01 | 업데이트 2023-03-23 21:05

읽기모드

가 < >

단열·차열 동시 구현한 페인트 개발
환경부·조달청 인증 획득



(왼쪽부터) 정영광 에쓰오일 신사업부문장 전무와 최장식 이유씨엔씨(EU CNC) 대표이사가 투자 계약을 체결하고 기념 사진을 촬영하고 있다.

**Signing the investment contract between S-Oil and EUCNC at
2023.03.23 Dong-A Newspaper**

에쓰오일, 페인트 벤처 회사 이유씨엔씨(EU CNC)와 투자 계약

정진욱 디지털매일 기자 jinuk@maeil.com

매일신문 입력 2023-03-23 11:00:00 수정 2023-03-23 10:28:50



사진=에쓰오일 우세민 기자 | CEO

에쓰오일이 23일 페인트 벤처 회사 이유씨엔씨(EU CNC)와 투자 계약을 체결한다고 밝혔다.

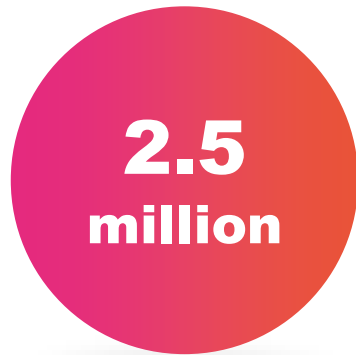
이유씨엔씨는 에너지 절약으로 탄소 저감을 달성할 수 있는 특수한 첨가제를 개발하여 단열과 차열을 동시에 실현 가능한 친환경 수성페인트 제조 기술을 보유하고 있다.

이 회사는 기술력을 인정받아 2022년 9월에 환경부의 녹색 기술 인증과 조달청의 혁신제품 자격을 각각 획득했다.

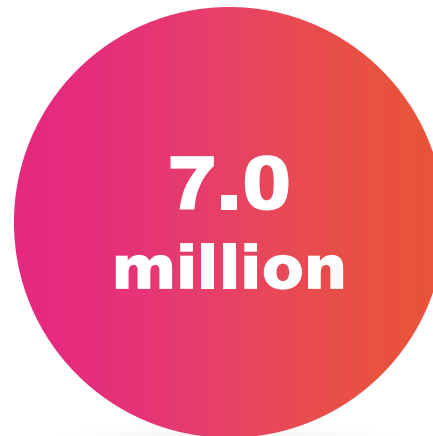
**Signing the investment contract between S-Oil and EUCNC at
2023.03.23 Maeil Newspaper**

Willing to Initial Public Offering (IPO) at 2026

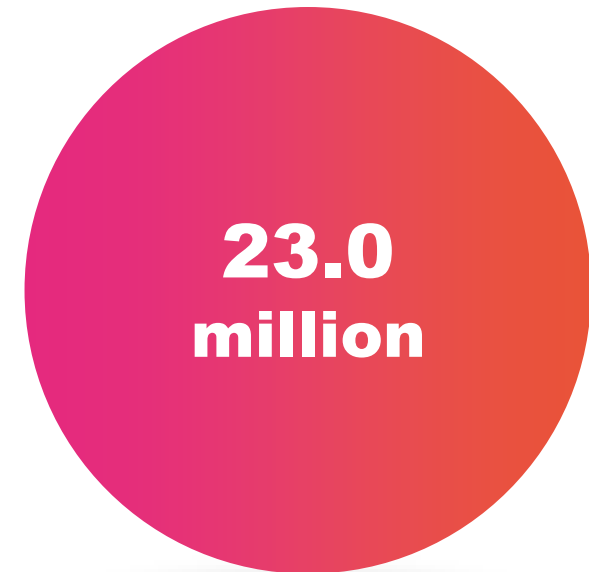
Sales at 2022



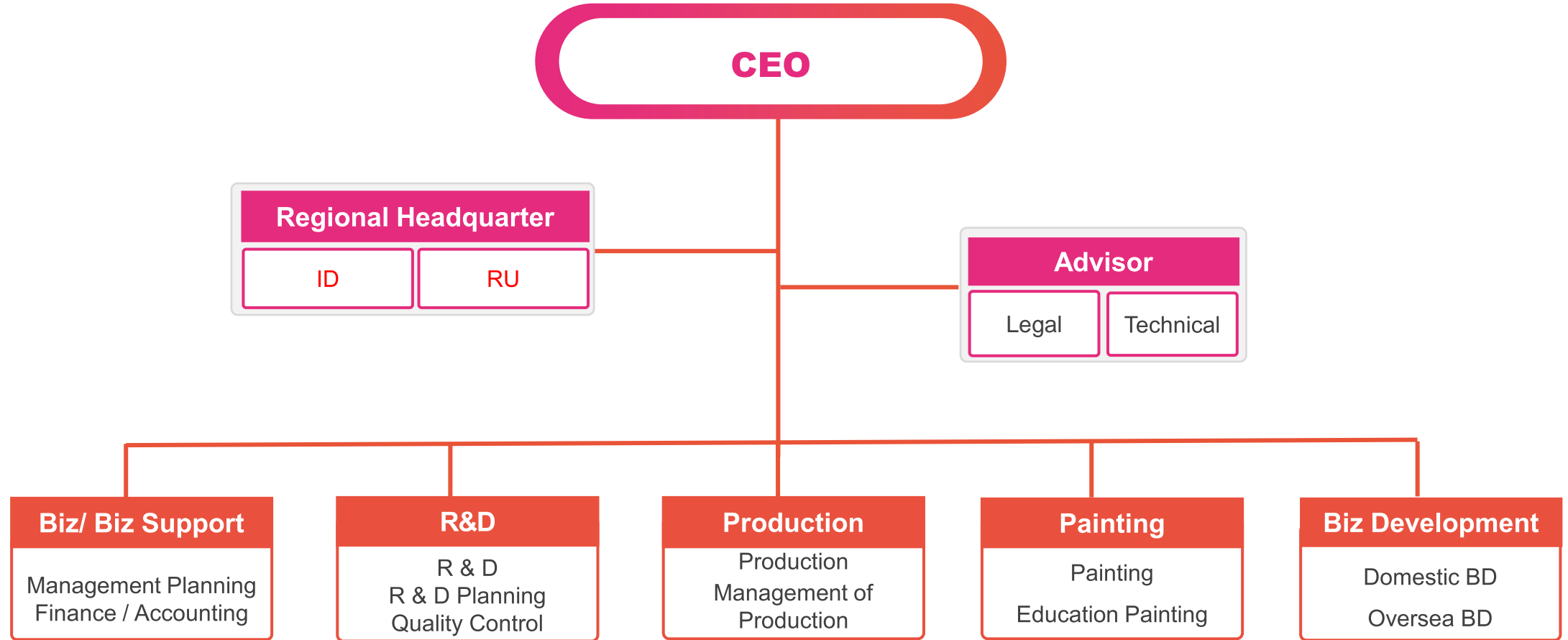
Goal at 2023



Projection for 2023



Company Organization



A Game Changer in Paints



APPENDIX



Manufacturing Facility for own production



Indonesia Painting Site



**Painting for two small container and monitoring for heat-isolation effect & power consumption
[2023]**

Reference

Heat-isolation & heat-shield sample Paint Export to Myanmar [2021.11.15]

Available to extended for the near
facility after Functional Upgrade

Boiler Inside & Dry Room Roof Printing



Certification for Export Declaration to Myanmar

Indonesia Partner

Customer

PT CITRAMAS ALFA SEJAHTERA

PT Citramas Alfa Sejahtera
Jl. Pinangia Timur 4 BB Jakarta 11110 Indonesia
www.citramasalfasejahtera.com email: daud.sekarmadidja@yahoo.com 62-21-625-1511

3. VALIDITY OF PURCHASE ORDER

This order is valid within 60 days of completion of the assignment
Purchase amount : 1 million dollars per year / Total 2 million dollars for 2 years

Development period : June 2022 ~ June 2024
Purchase period : July 2024 ~ June 2026

Purchase amount of \$1.75 million dollars (2,275,000,000 won / Korean currency)
(Based on exchange rate 1,300 won/1\$ on May 3, 2022)

Thank you for your kind cooperation and we look forward to you
Yours sincerely,

Buyer : PT CITRAMAS ALFA SEJAHTERA
Address : Jl. Pinangia Timur 4 BB Jakarta 11110 Indonesia

Director of president
Name : Mr. Daud Sekarmadidja

Supplier : EU CNC CO., Ltd
Address : Room 208, Environmental Industry Research Complex
D-dong, 410 Jeongseo Jinro, Seogu, Incheon Korea

240-88-01134
주이유씨엔씨 회장
전화번호 : 82-2-2600-4000
02-2600-4000
02-2600-4000

Director of president
Name : Mr. Jang sik Choi

1. TERMS AND CONDITIONS

No	Items
1	heat-blocking paint (only)
2	heat-insulating and blocking (compound)

2. PAYMENT CONDITIONS

Advance payment :
Loading : Within 30 days

Partner

PT ENORMO CAPITAL INDONESIA

PT. ENORMO CAPITAL INDONESIA
Real Estate Owned or Rented & Public Relations Activities
Iron and Steel Making / Factory and processing

LETTER OF INTENT

To : EU CNC Co., Ltd
Attn : Mr. CHOI JANG SIK / CEO of EU CNC
Cc : Mr. MOSES LEE / CMO of EU CNC

We PT. Enormo Capital Indonesia hereby would like to inform you that our company is highly interested in heat-insulating & heat-blocking paint marketing in Indonesia. We have verified the performance of the heat-insulating & heat-blocking paint sent from your company. And also we were able to confirm excellent heat insulation and blocking performance and very satisfactory results through the sample paint construction.

So, we are sending you this letter of intent for purchasing your product and also we would like to exact know how to paint it to maximize the heat insulation and blocking performance for the best in detail.

In addition, we are attaching data of the temperature reduction Performance that the first site of our company's sample paint construction so we hope it will be a great help to your work for global marketing.

We may say that PT. Enormo Capital Indonesia is the outstanding company of functional paint marketing in Indonesia market and also we have a good partnership with valuable companies for marketing of your functional paint.

Once again we would like to inform you that we are willing to do our every possible best to promote the excellent quality of your esteem Company in Indonesia.

Thank you for your kind cooperation and we are looking for the visiting of your esteem company to Indonesia in the near future.

Yours sincerely,

PT. Enormo Capital Indonesia
DIRECTOR
Mr. KIM JANG SOO

Room Executive Radian Intan, 8 Radian Intan B No 80 Kore 1
Duren Sawit, Kcc, Duren Sawit, Kcc, Jakarta Timur, Prop. DKI Jakarta
Tel : +62-21-750-2395, Fax : +62-21-750-2483, e-mail : cmoenormo@gmail.com

Partner

PT JS UTAMA

UTAMA
COMMERCIAL PAINT EQUIPMENT

ASTC (Alam Sutera Town Center) Blok 100 No. 19, Jl. Boulevard Alam Sutera, Serpong, Tangerang 15325, INDONESIA
Telp. 62 21 5367 4477 (Hunting), 534 4988, 534 7625, 339 23336 Fax 62 21 5367 8449 Email : jaylee@jutama.com

THE SUPPORTING LETTER

DATE : MAR. 17, 2022

TO : EU CNC CO., LTD
ATTN : MR. CHOI JANG SIK
CC : MR. MOSES LEE(SANG YEON)

WE "PT JS UTAMA IN INDONESIA" HEREBY WOULD LIKE TO INFORM YOU THAT OUR COMPANY IS HIGHLY INTERESTED IN AND CAPABLE OF HEAT- INSULATING & HEAT-SHIELDING PAINT MAKETING IN INDONESIA

WE MAY SAY THAT "PT JS UTAMA" IS THE OUTSTANDING COMPANY OF FUNCTIONAL PAINT MARKETING TODAY IN INDONESIA MARKET AND ALSO WE HAVE GOOD RELATIONSHIP WITH INDONESIA LOCAL FRANCHISE OF BUILDING MATERIAL AND WE HAVE A GOOD PARTNER-SHIP WITH VALUABLE COMPANIES FOR THE SOLUTION OF FUNCTIONAL PAINT MARKETING.

ONCE AGAIN WE WOULD LIKE TO INFORM YOU THAT WE ARE WILLING TO DO OUR EVERY POSSIBLE BEST TO PROMOTE THE EXCELLENT QUALITY OF "EU CNC CO. LTD'S" PRODUCT THROUGH DEMONSTRATION OF HEAT-INSULATING AND HEAT-SHIELDING PAINT IN INDONESIA.

AFTER RECEIVE ALL INFORMATION OF THIS PROJECT, WE WILL ARRANGE AND PREPARE FOR THE MEETING WITH OUR TEAM AND PARTNER COMPANY FOR DEMONSTRATION PAINT.

THANK YOU FOR YOUR KIND COOPERATION IN ADVANCE AND WE ARE LOOKING FOR THE VISIT YOUR ESTEEM COMPANY IN THE NEAR FUTURE

YOURS SINCERELY,

PT JS UTAMA

PT JS UTAMA
DIRECTOR OF PRESIDENT
MR. JAY LEE

The biggest store chain / 200 store all around Indonesia

Q&A



A Game Changer in Paint, EUCNC

Contact Information:

Jay Lee Oversea Business Development

email: jeahuck@gmail.com, mobile: +82.10.9280.8033