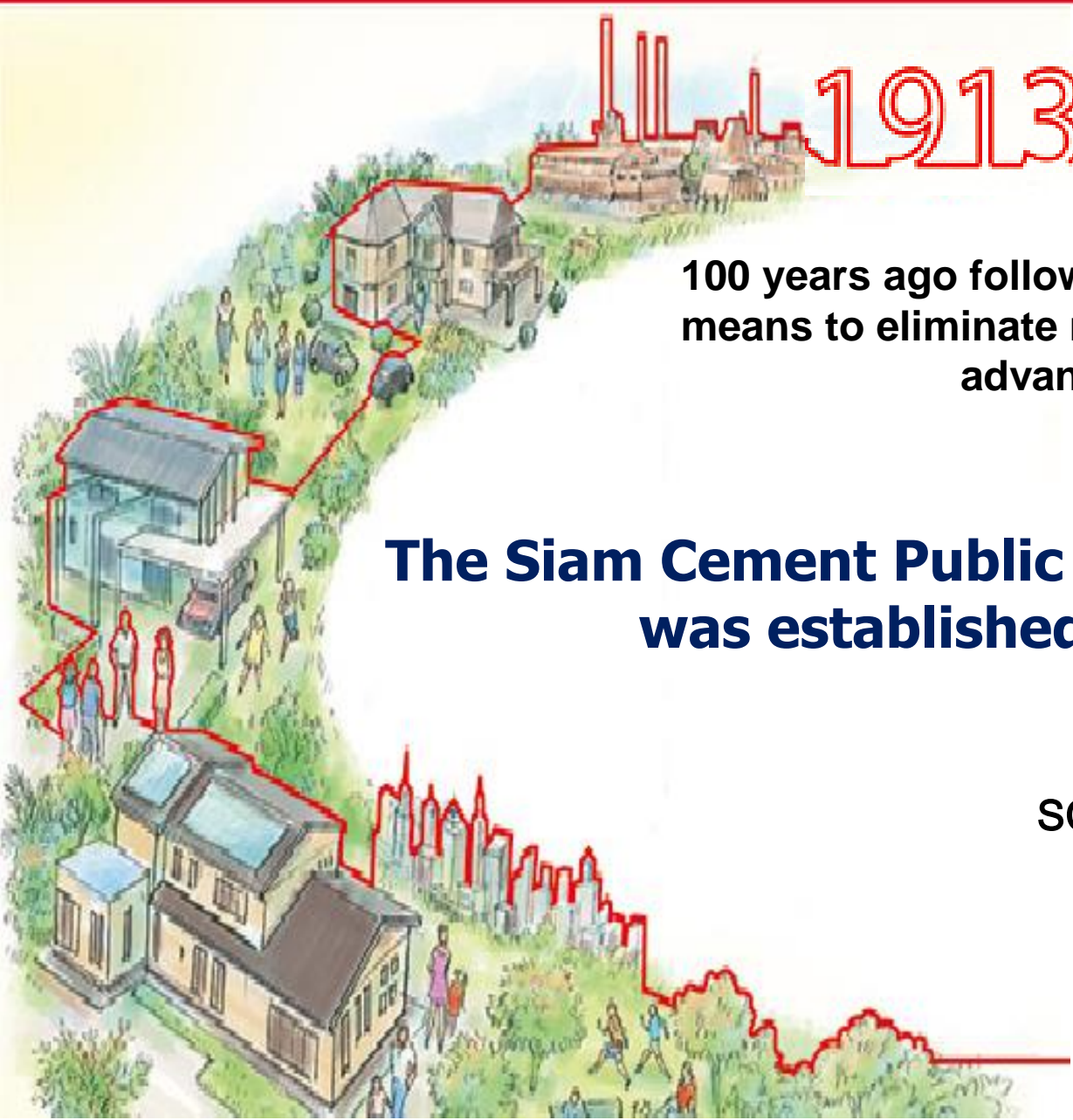


World Class
Total Refractory
Solution



SIAM
REFRACTORY
SOLUTIONS FOR YOUR SUCCESS

COMPANY PROFILE



1913

100 years ago following a Royal Decree of His Majesty King Rama VI as a means to eliminate reliance on imports of cement, as well as taking fuller advantage of the natural resources available in the country

The Siam Cement Public Company Limited was established in 1913

SCG comprises over 100 companies under 3 core business groups, with 52,000+ employees within ASEAN region



SCG's International Achievement of ESG towards Sustainable Business



Member of
**Dow Jones
Sustainability Indices**

Powered by the S&P Global CSA

SCG has been listed on the Dow Jones Sustainability Indices (DJSI) in the category of DJSI World and DJSI Emerging Markets in Construction Materials Industry for the 18th consecutive year by S&P Global

SCG is the first in ASEAN to have been included as DJSI member Since 2004

Green Initiatives: SCG eco value / SCG Green Choice



SCG eco value

82 products

26% of total sales

“Figures of SCG in 2016”



Since 2009



Since 2020

Ecology + Economy = eco

Balance and Sustainable Relationship of Economy, Society and Ecology

value

Value for Stakeholders, Society and Environment received from Innovative Products and Services

SCG Green Choice self-certification label is issued to SCG GREEN CHOICE products and services under the slogan

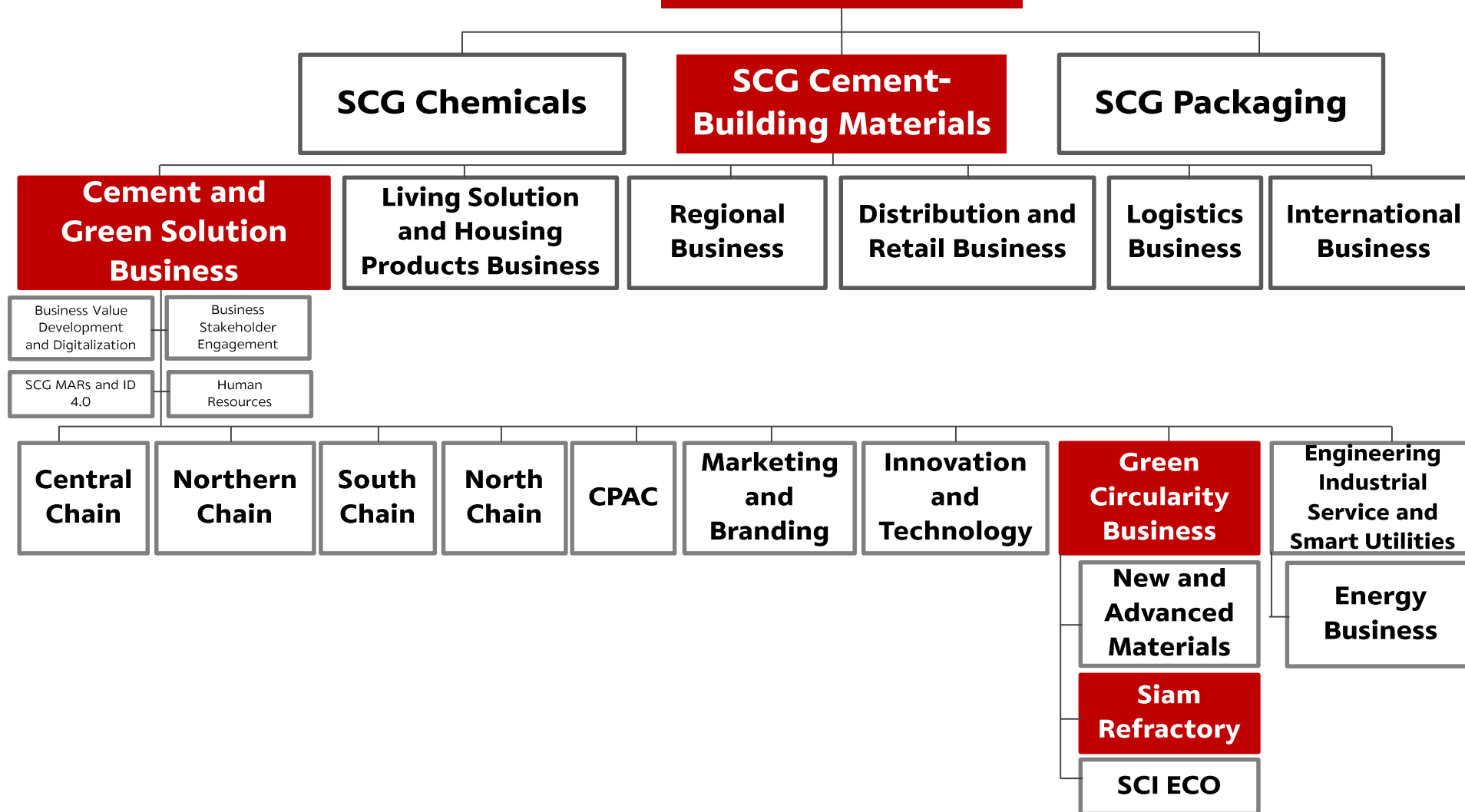
“ You can choose for the world ”

Criteria involve entire Product Life Cycle, e.g.

- ✓ Design
- ✓ Reduce the use of raw materials
- ✓ Reduce energy consumption
- ✓ Reduce the use of water in production
- ✓ Reduce energy consumption of consumers
- ✓ Use of materials and renewable energy Recycling
- ✓ Waste reduction
- ✓ Greenhouse gas emissions

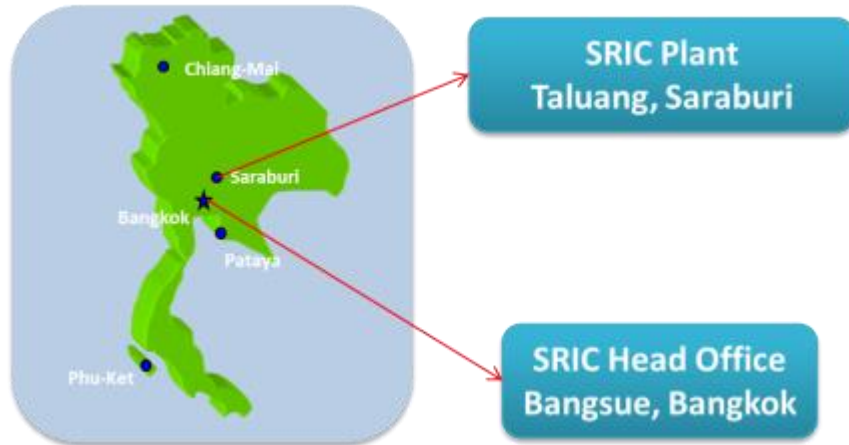
Since 2020, the **SCG eco value** label has evolved into the **“SCG Green Choice”** label to make it easy for consumers to understand.

Business Structure of

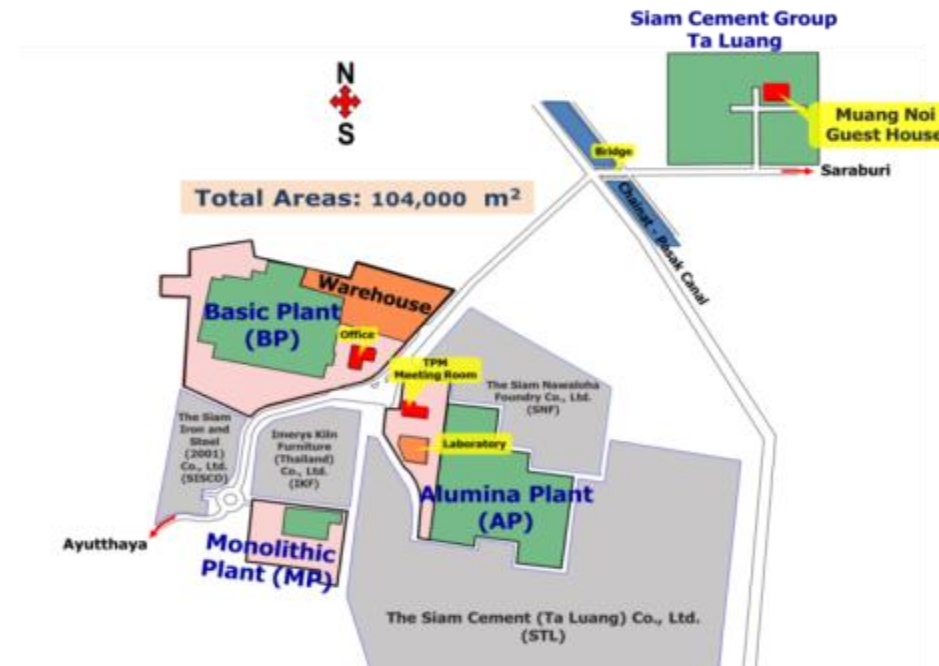


Siam Refractory Head Office (SCG Headquarters, Bangkok)





Established	1953
Capacity	177,000 Ton/Year
Total Area	104,000 m ²
Employees	347 persons
Subcontractor	599 persons



- 1. Alumina Plant (AP) 81,800 tons/year**
 - Brick 52,800 tons/year
 - Monolithic 29,000 tons/year
- 2. Basic Plant (BP) 60,000 tons/year**
 - Brick 30,000 tons/year
 - Monolithic 30,000 tons/year
- 3. Monolithic Plant (MP) 26,200 tons/year**

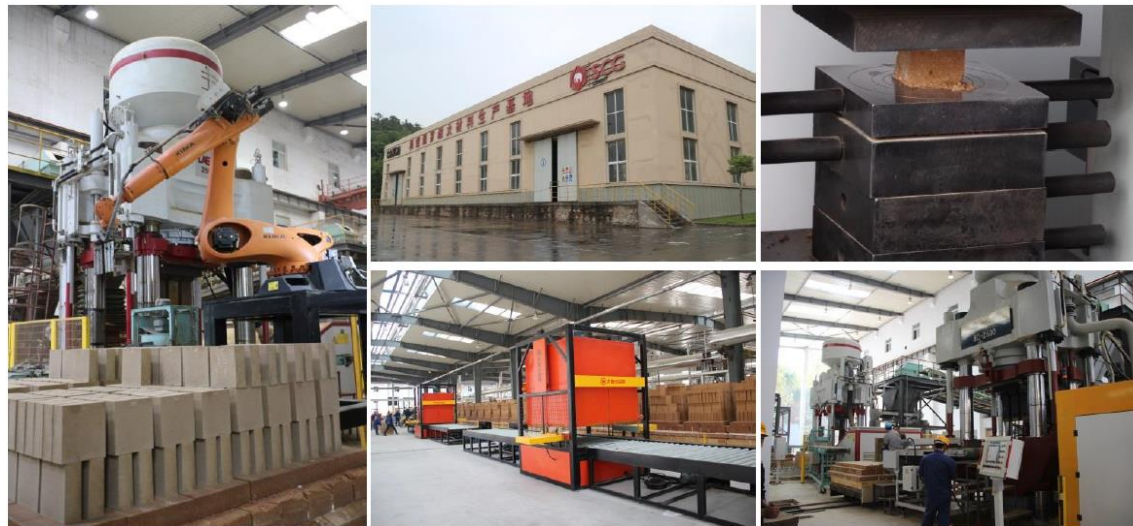
Siam Refractory Plant (Saraburi, Thailand)



Siam Refractory Production Base in China



CONCH Anhui Conch-SCG Refractory Co.,Ltd



Refractory Production

Basic Brick Capacity: 50,000 t/a
(Commissioned since 2013)

Alumina Brick Capacity: 25,000 t/a
(Commissioned since 2022)

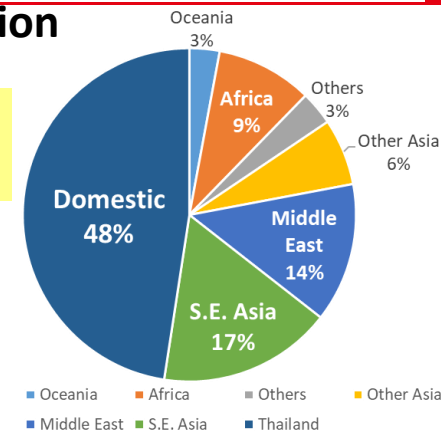
Siam Refractory Thailand's Milestones

- 1953 Founded Refractory Department
- 1974 Acquired technology from USA
- 1985 Acquired technology from Europe for Low Cement Castable
- 1991 Constructed Basic Brick Plant
- 1993 Acquired technology from Japan for Mag-Carbon Bricks
- Established The Siam Refractory Industry Co., Ltd. (SRIC)**
- 1994 Constructed Monolithic Plant
- 1996 Expanded Basic Plant capacity
- 2005 Expanded Basic Plant capacity
- 2009 Expanded Alumina Plant capacity
- 2009 Total production capacity 168,000 tpa
- 2013 Operated production base in China, capacity 50,000 tpa
- 2013 Launched world's first **Anti-Hydration Technology** for Basic Bricks
- 2016 Launched Industrial Services for Cement Industry
- 2019 Transition to Automated Production Lines
- 2020 Increased Capacity to 177,000 tpa by Automation+Debottlenecks
- 2021 **Green Products, Industrial Mining, Carbon Footprint in Refractory**

Market Segmentation

Information based on 2021

More than 80 Countries
More than 400 International Customers



Vision

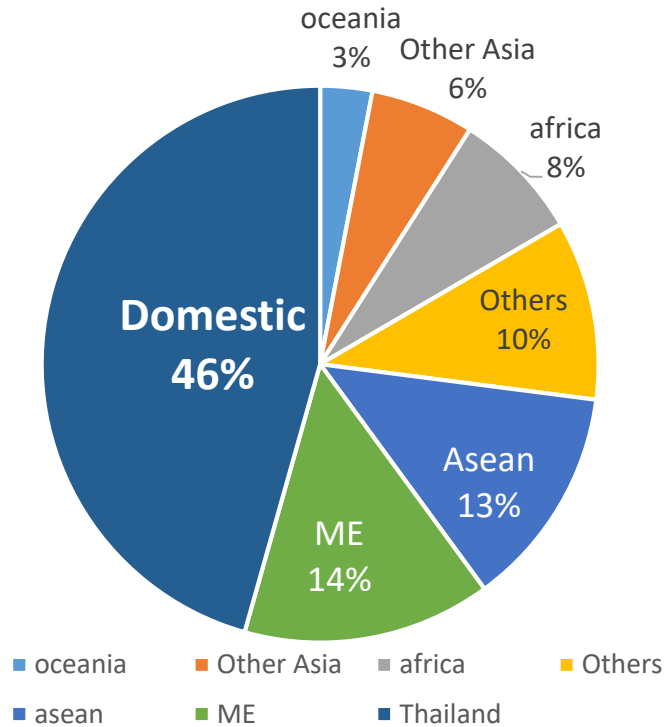
*To Be **World Class Refractory Leader** with **Sustainable Business Growth** and **Good Governance**. We execute with **Quality of Speed** in order to offer **Green Innovative Solutions** to **Delight Our Customers**.*



Business Scope

Market Segmentation

Information based on 2023



More than 80 Countries
More than 400 International Customers

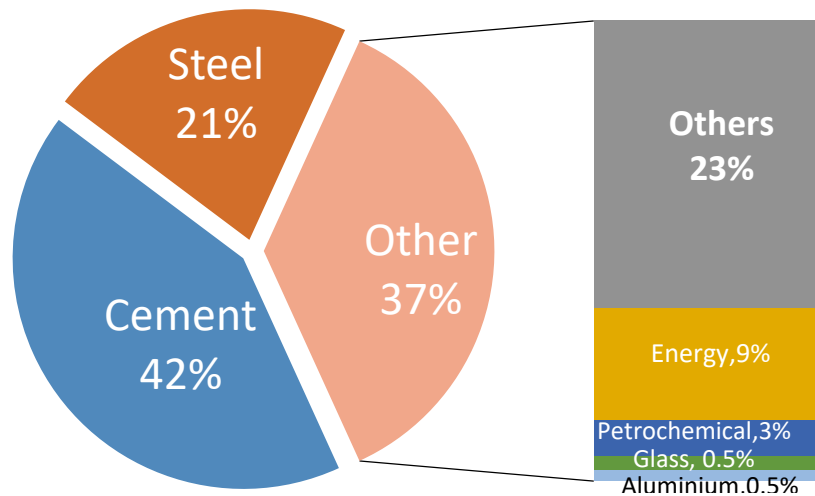
Industries and Products



Market Segmentation by Industries

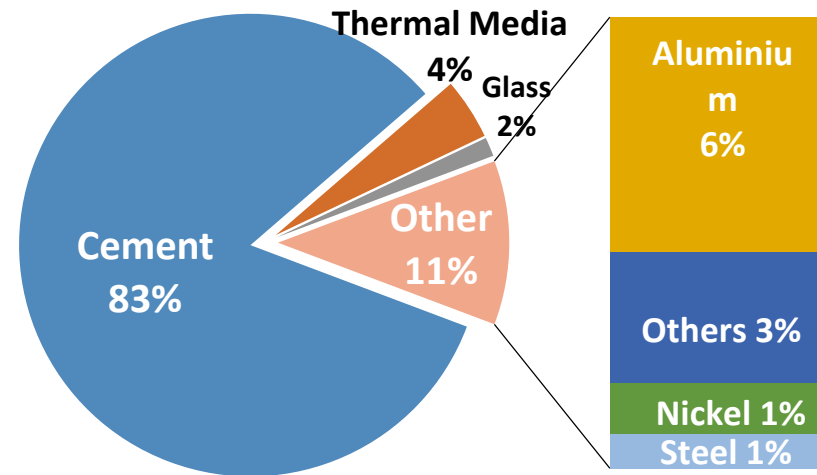
Domestic Market SRIC – 2023 Revenues

**1,981 million Baht
(56 million USD)**



Export Market SRIC – 2023 Revenues

**2,543 million Baht
(73 million USD)**



Shaped Products

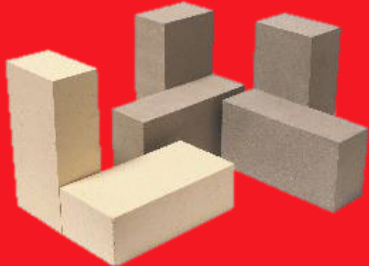
Alumina Plant (AP)



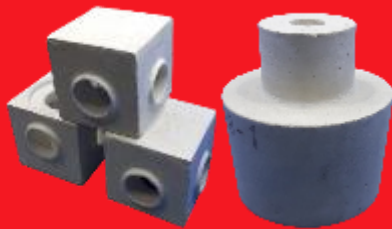
High-Alumina Brick



Fireclay Brick



Insulation Brick



Precast

Basic Plant (BP)



Basic Brick

Unshaped Products

Alumina Plant (AP)



Low Cement Castable



Plastic Refractory



Conventional Castable



Mortar

Basic Plant (BP)



Basic Monolithic
Ramming Mix
Gunning Mix
Spraying



Refractory-Related Materials



Monolithic Plant (MP)

Siam Refractory Post-Mortem Analysis



Research and Development



Determined to capture customers' latent needs and offer them innovative and state-of-the-art products so that they can cope with the harsh environment which they are confronting.

Technical Service

Technological competent and experienced team of engineers

Travel the world over to work closely with customers

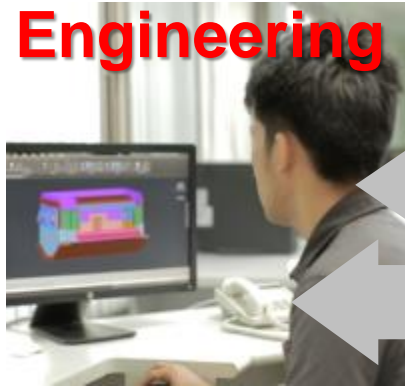
Offer tailor-made services throughout the whole project



**Offering Total Refractory Solution
to Fulfill Dynamic Demands**

Technical Service

Engineering



Engineering of Refractory Drawings

Best-Practice Lining Design

Calculation of Material Requirement

Inspection for Repairing

Planning of Refractory Installation

Supervision during Refractory Installation

Consultancy & Recommendation & Problem Solving

Supervision



Installation



Quality and Timely Installation

Installation by Well-Trained Installers

The World's First **Anti-Hydration Technology**

A Whole New World of Basic Bricks



“ A Life-Changing Innovation ”

Celebrating 9 Years of Success !

- ✓ Supplied to **100+** Cement Plants
- ✓ To **30+** Different Countries Worldwide
- ✓ Quantity of over **40,000+** tons
- ✓ No Report of any Hydration of AH-Bricks Supplied

Green Initiatives: SCG eco value / SCG Green Choice



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Refractory for Today ...

Green Products, Industrial Mining, Low GHG Emission Refractory



SIAM
REFRACTORY
SOLUTIONS FOR YOUR SUCCESS

Produce your Certified Carbon Footprint Cement
with our Certified Carbon Footprint Refractory*



Available with Refractory

for Cement Industry including:

- ✓ Upper & Lower Transition Zones
- ✓ Sintering Zone
- ✓ Safety Zone
- ✓ Calcining/Preheating Zone
- ✓ Castables



Change Today ... For Better, Greener, and More Sustainable Tomorrow ... Together

The first refractory manufacturer to concern for **sustainable growth of your business**

by our Certified Carbon Footprint Refractory available with full range of refractory products for cement industry.



www.siamrefractory.com



sricmkt@scg.com



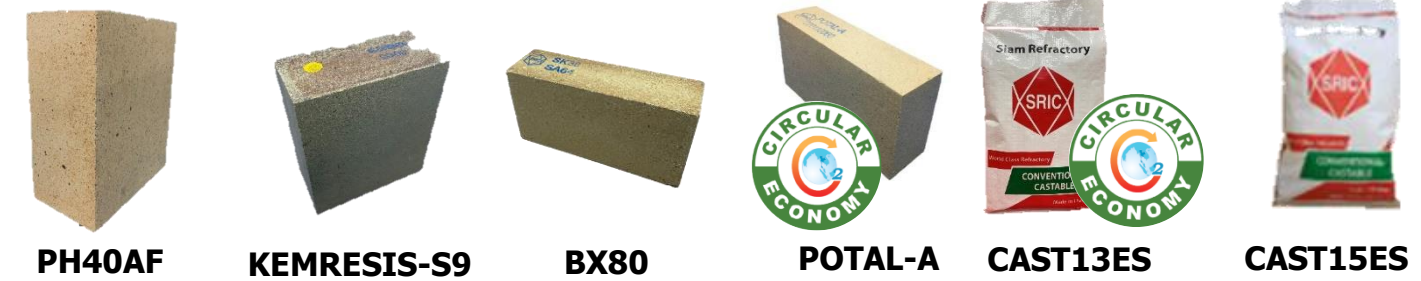
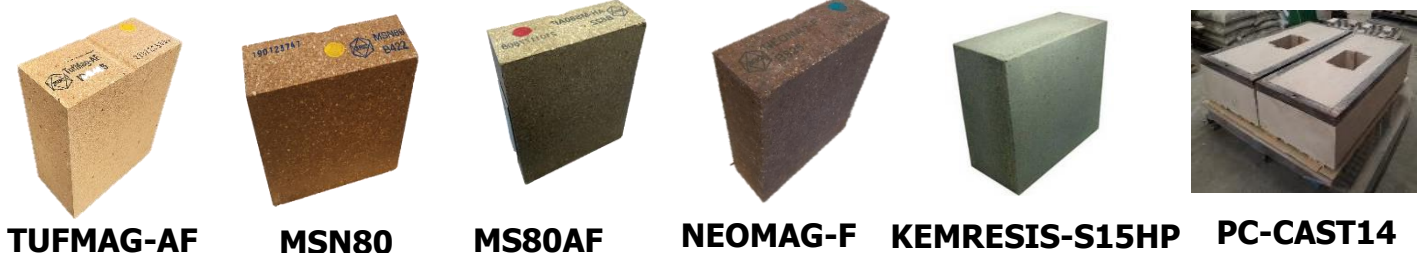
Refractory Club by Siam Refractory



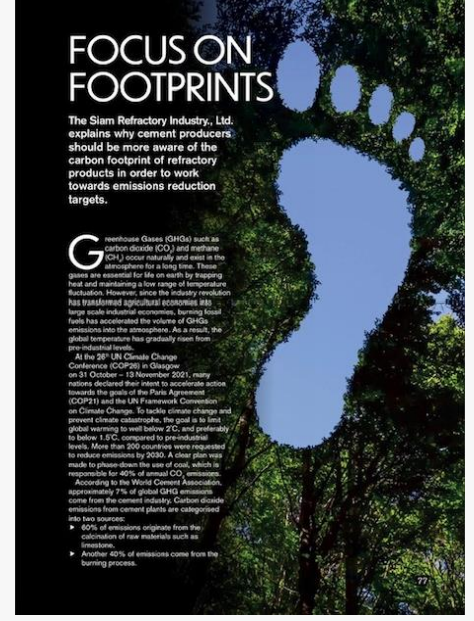
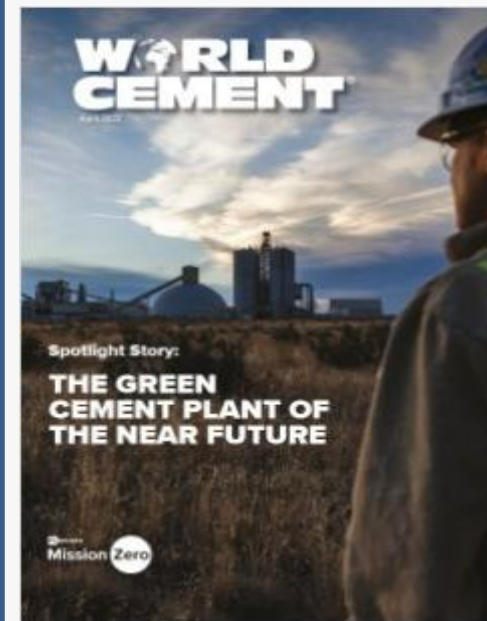
*Certified by: Thailand Greenhouse Gas Management Organization (TGO)



Registered Carbon Footprint Products 2017 – 2022 : 17 Products



Technical Article published in World Cement: Issue of Apr 2022



Refractory products are essential in the steel-making process, which is a high-temperature process. The refractory products are used in the blast furnace, converter, and ladle. The refractory products are used in the steel-making process to protect the steel from the heat of the molten metal. The refractory products are used in the steel-making process to protect the steel from the heat of the molten metal. The refractory products are used in the steel-making process to protect the steel from the heat of the molten metal.

Our high efficiency separator for every need

Compatible with almost any grinding plant
 Reliable operation
 Maintenance-friendly
 The best way to invest today

Visit us at christianpfeiffer.com

The company has established an excellent reputation for its refractory products in the steel-making industry. The company's products are used in the blast furnace, converter, and ladle. The company's products are used in the steel-making process to protect the steel from the heat of the molten metal. The company's products are used in the steel-making process to protect the steel from the heat of the molten metal.

Refractory for Today ...



THE SIAM REFRACTORY INDUSTRY CO.,LTD.

1 Siam Cement Road , Bangsue , Bangkok 10800 , THAILAND

Tel : (66 2) 5863242-52 , Fax : (66 2) 5872149 , 5862982

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Data Sheet

MS 80 AF

Classification : Magnesia-Spinel Brick (For Alternative Fuel)

Environmental Indications :

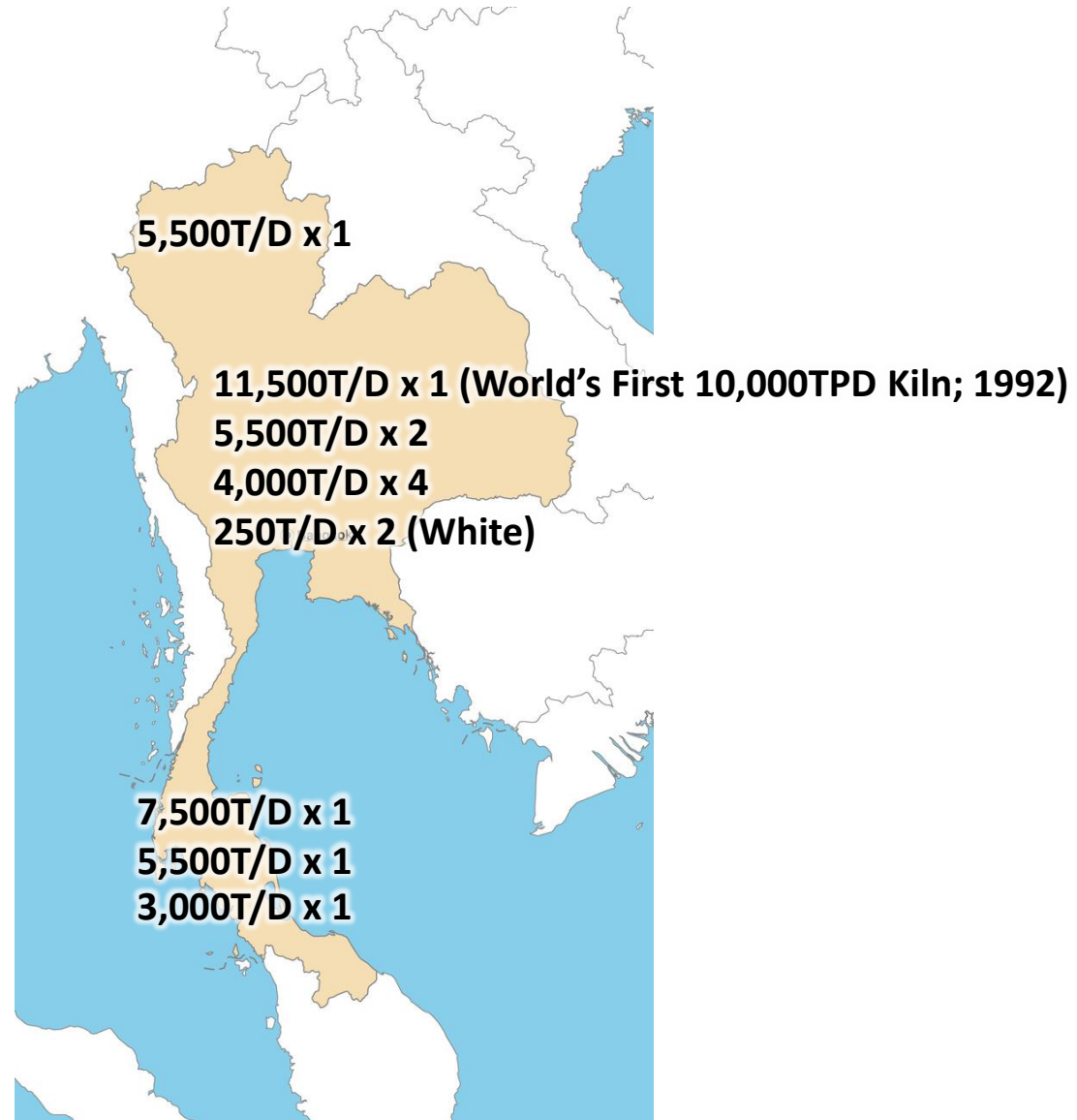
Product Carbon Footprint (ISO 14067) t CO₂e/t prod. 3.07*

* As Certified by TGO (Thailand Greenhouse Gas Management Organization)

Physical Properties :

Refractoriness	Orton Cone	>38
Bulk Density	kg/m ³	2970
Apparent Porosity	%	14.0
Cold Crushing Strength	kg/cm ²	500
Modulus of Rupture	kg/cm ²	50

Siam Cement Plants in Thailand (13 Kilns)



Siam Cement Plants outside Thailand (7 Kilns)





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