







Sharing Practical ESG

Implementation & Enhancing Investment Efficiency



Agenda

- ResponsibleSteel™ The ESG Journey of NS BlueScope VN
- Case Study: ESG Criteria Implemented in NS BlueScope VN

ENVIRONMENT

- Climate Change and Greenhouse Gas Emissions
- Noise, Emissions, Effluents and Waste
- Case Study: EPD & Green Certification

SOCIAL

- Occupational Health and Safety

GOVERNANCE

- Responsible Sourcing

BLUESCOPE: WORLD'S LEADING PROVIDER OF COATED STEEL

BlueScope

A global leader in premium branded Coated and Painted steel products.

NS BlueScope

50:50 joint venture enterprise between BlueScope and Nippon Steel Corporation of Japan, operates in ASEAN and North America.

NS BlueScope Vietnam

NS BlueScope Vietnam is now operating three factories in Phu My coating line (since 2005), Bien Hoa roll-forming line (since 1997) and Hung Yen.



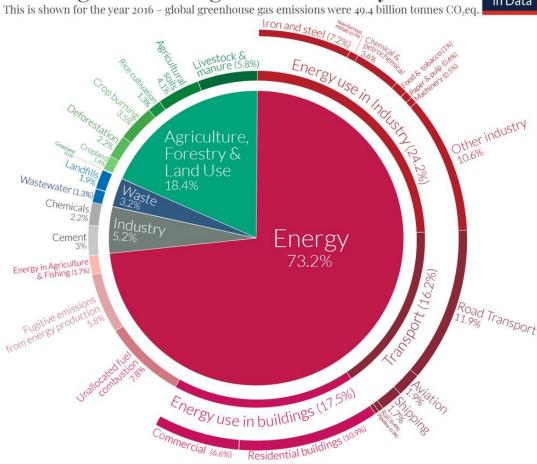
Social negative perception of a highly polluted heavy industry





Global greenhouse gas emissions by sector

Our World in Data



OurWorldinData.org - Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020).

Licensed under CC-BY by the author Hannah Ritchie (2020).

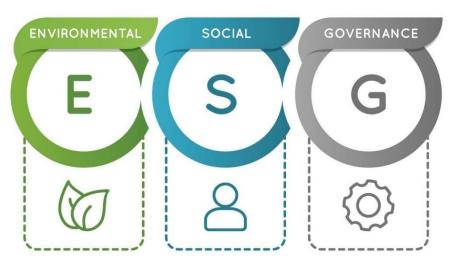


Can we implement a sustainable ESG strategy for heavy industry?





BLUESCOPE - THE 1st STEEL BRAND TO APPLY "RESPONSIBLE STEEL" - AN INTERNATIONAL CUSTOMIZED ESG FRAMEWORK FOR STEEL INDUSTRY



- ✓ General framework for all industries
- ✓ Early stage in Vietnam



- ✓ Global steel industry's multi-stakeholder sustainability standard & certification program Customized for Steel industry
- ✓ Audit and assessment against **the 13 principles** of the ResponsibleSteel[™], covered a range of environmental, social & governance **(ESG) criteria**
- ✓ **Clearer roadmap** and specific focused with global certified standard

THE ESSENTIAL FACTOR
TO SUSTAIN BRAND LEADER POSITION
OF BLUESCOPE IN STEEL INDUSTRY

"A structured framework used to evaluate how a company manages its impact on the environment, treats its employees and communities, and ensures effective governance practices".



ENVIRONMENTAL

- 8. Climate Change & GHG emission
- 9. Noise, Emissions, Effluents & Waste
- 10. Water Stewardship
- 11. Biodiversity

SOCIAL

- 3. Occupational Health & Safety
- 4. Labor Rights
- 5. Human Rights
- 6. Local Communities
- 7. Stakeholder Engagement & Communication

GOVERNANCE

- 1. Corporate Leadership
- 2. ESG Management Systems
- 12. Decommissioning & Closure
- 13. Responsible Sourcing

ENVIRONMENT

- Climate Change and Greenhouse Gas Emissions
- Noise, Emissions, Effluents and Waste







Our climate strategy outlines our plans to address the climate challenge. Our decarbonisation pathway sets out BlueScope's approach to reducing GHG emissions across the business





Reduce our GHG emissions in response to evolving climate science, technology availability and key investment decisions



Use quality and cost-effective carbon offsets, only where direct abatement is not feasible



Create carbon-efficient and climateresilient solutions for our customers



Making the case for local, sustainable steel in our communities



Increase our use of affordable and reliable renewable energy



Monitoring and appropriately managing climate risks and engaging with external stakeholders and partners.



BLUESCOPE CO₂ EMISSION REDUCTION AMBITION

Continuing our pursuit of emissions reduction projects in line with our 2050 Net Zero goal and 2030 steelmaking and non-steelmaking targets

SET A GOAL FOR:

NET ZERO

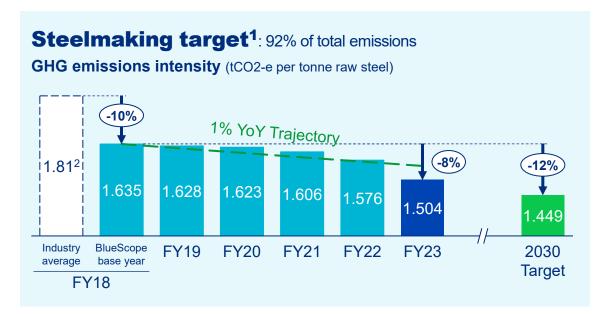
Green House Gas (GHG) emissions across our operations by 2050¹

SET TARGETS FOR:

12% GHG emissions intensity reduction by 2030 for our steelmaking activities

(based on 2018 levels)

30% GHG emission intensity reduction by 2030 for our non-steelmaking activities² (based on 2018 levels)



Non-steelmaking target³: 7% of total emissions GHG emissions intensity (tCO2-e per tonne despatched steel) -30% Target published 0.250 at FY2021 0.241 0.233 0.228 **Annual Results** 0.175 **FY18 FY19** FY20 FY21 FY22 FY23 2030 (base year) **Target**

Steelmaking target: 12% by 2030

Non-steelmaking target: 30% by 2030



BLUESCOPE CO₂ EMISSION REDUCTION - SCOPE 1 & 2



NS BlueScope Vietnam Climate Change Strategy

Phase 1
(All activities from FY13 until FY22)

Phase 2 (From FY23-FY26)

Phase 3 (From FY27-FY30)

- · LED lighting installation
- Insulation incinerator
- · Auto LEL control oven CPL
- Enhance operation process efficiency (Oven, Furnace, Incinerator)
- Reduce temperature set point incinerator MCL&CPL
- Zero N. Gas at MCL cleaning section
- · Mixed purge oxygen with N. Gas MCL & CPL incinerator
- Furnace and Ovens Insulation improvement
- Enhance motor efficiency
- Inverter installation for hydraulic, cooling system
- Automation system
- New Air-Conditioner

- Solar rooftop on Manufacturing building2000-2500KWh
- RTO CPL





ENVIRONMENTAL

CASE STUDY

BLUESCOPE CO, EMISSION REDUCTION - SCOPE 1 & 2 **NS BlueScope Vietnam Climate Change Road Map**



Total Scope 1&2 Reduction

FY18-FY22

FY23-26

FY27-FY30



Reduce **Natural Gas** FY18 to FY22 Carbon intensity not change due to change technology from AZ to AM

FY18 =0.173 tCO₂e/t, FY22 =0.177

7% reduction from FY26

11% reduction from FY28



FY18 to FY22 Carbon intensity not change due to change technology from AZ to AM

FY18 =0.173 tCO₂e/t , FY22 =0.177

6% reduction from FY18-22

6% reduction from FY29



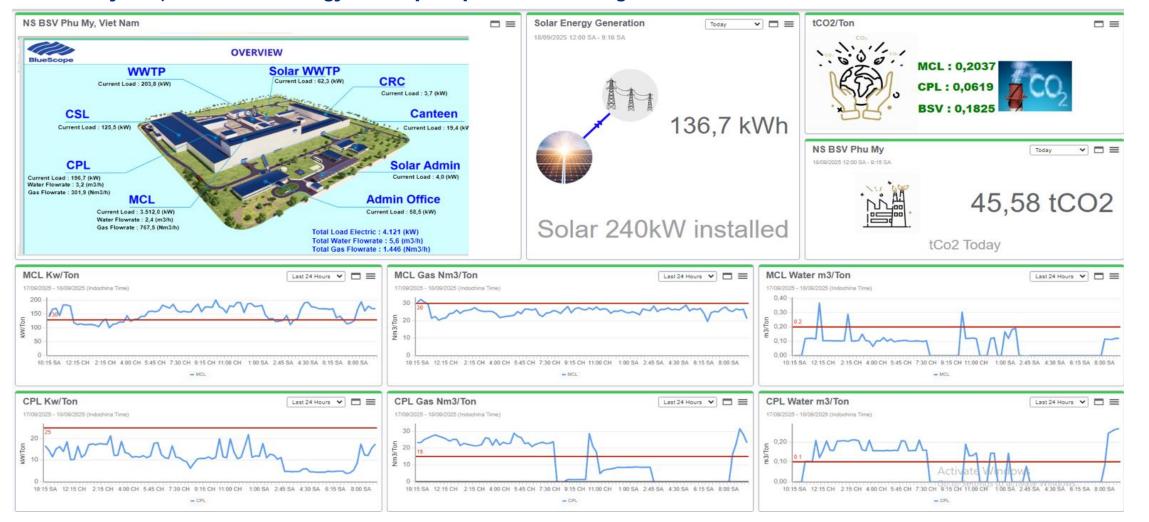
Total 30%



BLUESCOPE CO₂ EMISSION REDUCTION - SCOPE 1 & 2 Power management energy

The system installed 2023

From the system, we will know energy consumption per lines and CO2 generate real time





BLUESCOPE CO₂ EMISSION REDUCTION - SCOPE 3

WASTE MANAGEMENT HAZARDS WASTES REDUCE/ REUSE/ RECYCLE INITIATIVES



#1. HAZARDS WASTE TO NON-HAZARD WASTES

Yearly **38 tons** slugs need outsourcing. Improved by: Reduce 25% weight by drier process & Convert to non-hazard wastes



OLD PROCESS: Old technology, low capacity







NEW PROCESS: Investment slugs treatment machine





Next: Convert hazard waste to normal waste

Saving: ~65mil VND

#2. RECYCLE SOLVENT



33T waste solvent, Recyced **3.5T** (9%) for coater cleaning purpose.

Disposal solvent in cleaning

Outsource Qualified





Recycle solvent & ready to use

External distillation process

#3. RE-USE PAINT

45.387 L paint aging in FY25 , Reused **2500L** \approx 3.2T (5%) for internal floor/ equipment painting.









Saving: ~200mil VND \approx 9.3 tons CO2





BLUESCOPE CO₂ EMISSION REDUCTION - SCOPE 3



WATER STEWARDSHIP

In FY25, NS BlueScope VN consumption is 53k m3 water ≈ 0.41m3/ ton product:

Initiative: Install 3 tanks cap 1200m3 harvest raining water:



Saving: ~5,109 m³ ≈ 64mil VND

- Compliance: The MSS process treats water to B level before sending to IZICO, where it is further treated to A level before discharge into the environment.
- ❖ Compliance: We are using 100% city water source.

Water treatment plan

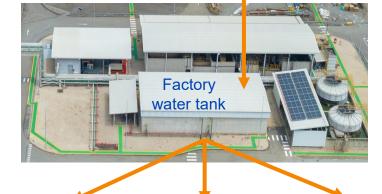


3 tanks for raining harvesting





Water treatment plant processing









Production lines

Tree watering

Utilities process



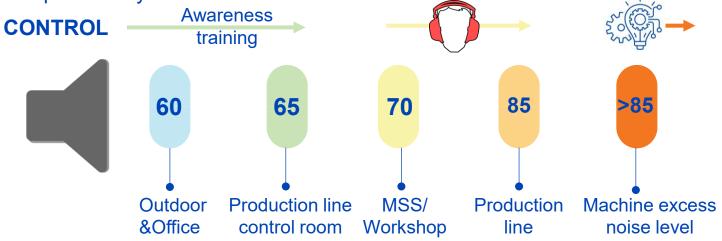
NOISE REDUCTION

BLUESCOPE CO₂ EMISSION REDUCTION - SCOPE 3



NSBV's coil coating plant is classified as the heavy industry with noise levels >85 dB. Annual 3rd party measurements & control plans ensure compliance with legal requirements

& improve daily work.









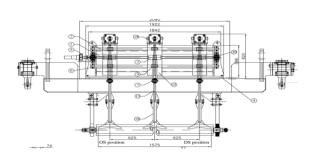




MACHINE NOISE REDUCTION

Examples: Switch air motor to electric system to eliminate noise. Add noise level limit to seller's machine specification.







WORKING STATION: NO ROOM



Installed room in production line, reduced 85db to 65db.







BLUESCOPE - THE LEADING GREEN BUILDING JOURNEY









1st coated steel material meet LEED standard

THERMATECH®

1st "Green Basic offer" promoted by BlueScope

1st coated steel material meet higher requirement from LEED Ver.4







2010 2011

2012

2016

1st "coated steel" office LEED O+M Ver.4 - GOLD certificate





1st "coated steel" office LEED BD+C Ver.4 - GOLD certificate



1st LEED Green buildings in Vietnam using COLORBOND® steel



1st "mini workshop series" promote Green buildings concept by BlueScope



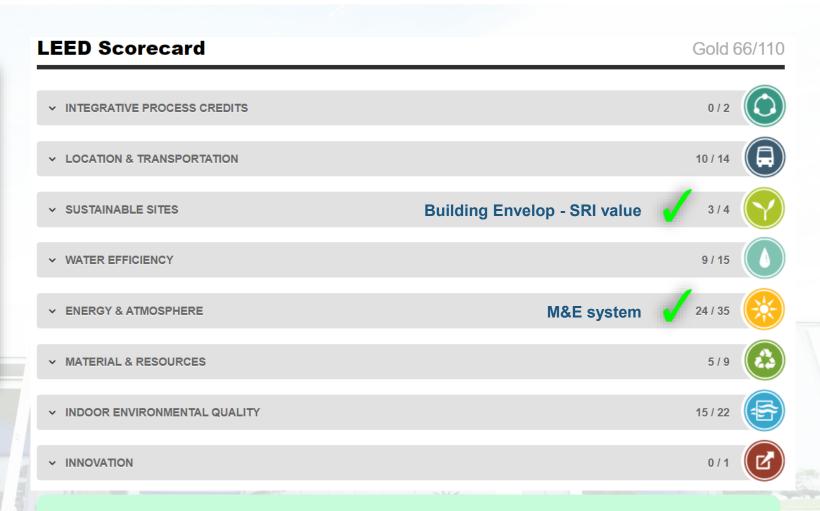


BlueScope

BLUESCOPE - THE LEADING GREEN BUILDING JOURNEY 1ST "STEEL" OFFICE WITH LEED O+M GOLD CERTIFICATE







5- year validity certificate



BLUESCOPE - THE LEADING GREEN BUILDING JOURNEY



1ST "COATED STEEL" OFFICE WITH LEED BD+C GOLD CERTIFICATE



LEED Scorecard		Gold 6	67/110
✓ INTEGRATIVE PROCESS CREDITS		2/2	
✓ LOCATION & TRANSPORTATION		17 / 20	
→ WATER EFFICIENCY		10 / 12	
→ ENERGY & ATMOSPHERE		19 / 38	
→ MATERIAL & RESOURCES		4 / 13	
→ INDOOR ENVIRONMENTAL QUALITY	Fresh air system 🗸	8 / 17	
→ REGIONAL PRIORITY CREDITS		3 / 4	P
→ INNOVATION		4/6	

One-time certification – no renewal required

LEED BD+C VS LEED O+M?







Building Operation& Maintenance

EPD CERTIFICATE TO MEET GREEN BUILDING REQUIREMENT



GRANTED in July 2025







Environmental **Product D**eclaration (EPD) is an **independently verified and registered document** that communicates transparent & comparable information about **the life-cycle environmental impact of products** in a credible way.

Compliance with ISO standard

Environmental product certification

Verified by 3rd party

Published on independent EPD operation

Valid in 5 years







THE SMART CHOICE FOR YOUR FACTORY

LONG-TERM SERVICE LIFE FOR ROOF AND WALL SOLUTIONS



Meet



Lifecycle of **Building**

40 - 50 Years or more



EFFECTIVE INVESTMENT



High Return on Investment (ROI)*

(*) Typical manufacturing investment period is 10 years.

Roof & Wall Solution























THE SMART CHOICE FOR YOUR FACTORY











SOCIAL

Occupational Health and Safety

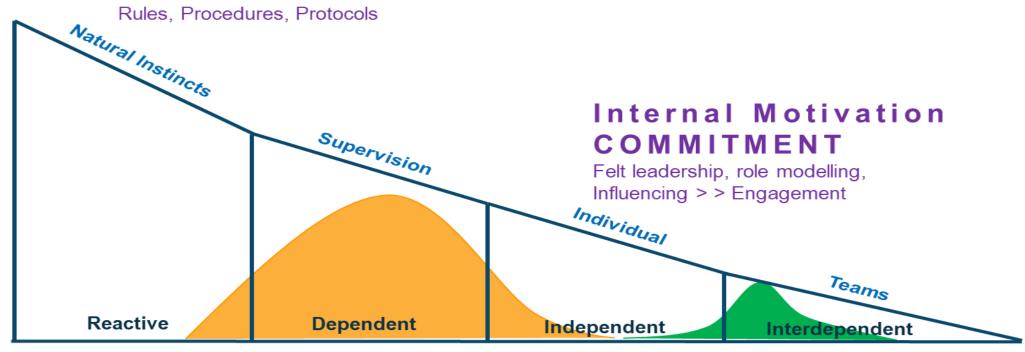




BlueScope

SAFETY CULTURE – Endless Journey to Interdependent Stage

External Motivation COMPLIANCE



- Obedience
- Safety by natural instinct
- Responsibility of Safety Officer
- Management commitment
- Discipline
- Rules/procedures

- Comprehension/integration
- Personal commitment
- Involvement of organization
- · Team spirit
- Recognition
- Collective responsibility

"I follow the rules because I have to"

"I follow the rules because I want to"



FALL PREVENTION – Safety is not defined by the absence of accidents, but by the presence of capacity



















Health & Wellbeing – Our People are Our Strength!





























GOVERNANCE

- Corporate Leadership
- Responsible Sourcing







The "Governance" in ESG (Environmental, Social, and Governance) refers to how an organization is <u>led and managed</u>.

It starts with the need of how to build trust with the stakeholders.

Here are some key aspects from BlueScope standpoint:





RESPONSIBLE SOURCING PROGRAM







OBJECTIVE

- Sustainability principles are embedded within our sourcing processes
- Create, protect and grow long-term.





BSV RESPONSIBLE SOURCING PROGRAM

✓ From 2019, we partner with BSV suppliers to manage supply chain risk in terms of E,S, G and follow the guiding pillars:

BUSINESS ETHICS – LABOUR & HUMAN RIGHT – HEALTH & SAFETY – ENVIRONMENT – COMMUNITY

OUR PROCESS

PRIORITISE → ENGAGE



Supply chain and industry risk factors.



Internal and external engagement



Structured assessment framework with independent assessments



Collaborate with and reassess suppliers to drive continuous improvement.



OUR RECORD

finished assessment

SUPPLIERS

C02 emission reduction commitment

SUPPLIERS

NS BLUESCOPE VIETNAM RESPONSIBLE SOURCING ROADMAP





Assessment and conduct 2020 corrective action plan

On-site audit & building awareness

Responsible Sourcing Program

Introduce and conduct Self Questionnaire Assessment (SAQ) with 6 key suppliers focus on Priority 1 e.g. CRC, Paint, Ingot

Organized first ever in-house Supply Chain Sustainability Day on 6th December 2019

Complete assessment of 12 key suppliers on Priority 1 & Priority 2 with High & Moderate risk

Working with suppliers on corrective action plan for improvement

On-site audit with 3 high-risk suppliers after assessment (ELEVATE)

Continued building awareness and communicate with both current and new suppliers

PHASE 1 (2022 - 2023)

- 22 Apr'22 Program launch with 35 kev suppliers
- Training Program

A profile used to optimize

survey to your industry, size,

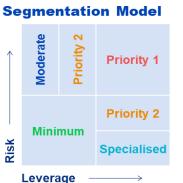
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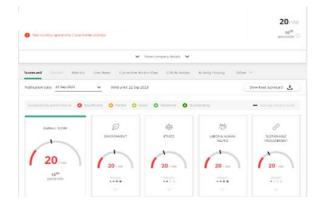
 Assessment for 12 suppliers through 3rd party Ecovadis

PHASE 2 (2024 - 2025)

- Engage supplier's selfassessment via EcoVadis IQ+/Vitals
- · Improvement plans based on EcoVadis's assessment
- On-site Audit 3-5 suppliers
- Series of workshops for training / building awareness









documentation

A secure, confidential &

multilingual survey with a

support team ready to help

& Corrective Action Plan An independent document audit, evaluation & analysis Share results, collaborate from CSR experts

directly online with clients, and improve performance



PluoScope

RESPONSIBLE SOURCING EMBEDDED IN SUPPLIER SELECTION

We allocate at least 15% weighting for Responsible Sourcing

Supplier Evaluation & Tender Award (Decision Analysis)						
#	Criteria	Transport & Onsite Contractor	Raw Material	Goods & Services offsite		
1	Sustainability	25%	20%	15%		
1	Safety, Health, Environment Impact	10%	5%	5%		
2	Value chain's responsibility** (manufacturer, transport, sub-contractor)	5%	10%	5%		
3	Human & Labour rights	10%	5%	5%		
4	Supplier Diversity (local, minority, woman owner, etc)	Special criteria (to be decided case by case)				
Ш	Technical, Quality & Services Capability	75%	80%	85%		
Ш	Commercial Tender (competitive price, payment, etc)					

^{**} Impact assessment to LAWWNE resources (Land, Air, Water, Waste, Noise, Emission) in that supplier's entire value chain.

^{***} A supplier, with the highest score, however containing a zero scoring for any criteria, only can be awarded if that supplier commits to have an improvement plan in place for that missed item.

Supplier Performance Re-assessment							
#	Criteria	Transport & Onsite Contractor	Raw Material	Goods & Services offsite	Resources		
-1	Sustainability	60%	50%	40%			
1	Safety, Health, Environment Impact	20%	20%	10%	Lagging KPI		
2	Business Ethics	10%	10%	10%	Lagging KPI		
3	Social compliance in labour management (Modern Slavery)	20%	10%	10%	Onsite/ offsite audit		
4	Good Practice implement in ESG	10%	10%	10%			
П	Quality & Services performance	40%	40% 50%	60%			
Ш	Cost reduction initiatives						
Assessment Frequency Half-yearly			Half-yearly	Half-yearly			
<50	<50/100 scoring result The supplier must have corrective actions plan to be implemented on an agreed timeframe with NSBSV.						
Termination The supplier fails to commit or act based on the corrective actions on an agreed timeframe							





RESPONSIBLE LOGISTIC & TRANSPORTATION



