



Energy Efficiency Practices to Decarbonise the Textile and Industrial Sectors in Vietnam: Experience from Tay Ninh Province
Reshmi Ranjith, Asia Regional Lead for Energy Transition, WWF Hong Kong
5 June Asia Clean Energy Forum

WWF Global Energy Framework



Global Energy Policy Framework

Five key action areas



Use energy efficiency and sufficiency to reduce energy demand



Actively phase out all fossil fuels



Generate only renewable electricity



Electrify all we can



Deploy renewable solutions for energy that can't be electrified

Faster



- Transitional policy
- Buy-in from cities, companies, and citizens
- Financing

Greener



- Energy planning that minimises nature impacts
- Reduced footprints and increased circularity
- Conserving and restoring nature

Fairer



- Equitable energy access
- Climate justice
- A just energy transformation

Faster, greener, and fairer action in five key areas to achieve 100% renewables

The Climate Solutions Partnership



HSBC, WRI and WWF are working together to scale up climate solutions that support the transition to a net-zero global economy that protects and restores nature, through the Climate Solutions Partnership (CSP).

The CSP has two pillars, Nature and Energy:

The Energy Transition in Asia Pillar has three primary implementation approaches:

1. Raising ambition to drive emissions reduction;
2. Demonstrating efficient and renewable energy solutions; and
3. Growing low-carbon business and finance opportunities.

The Nature Pillar has two main focal areas:

4. Accelerating deforestation and conversion free supply chains; and
5. Enabling high quality Nature-based Solutions (NbS) to scale.

The Partnership also captures and amplifies lessons and best practices from both pillars and engages with a wide set of partners to help increase the impact of our work together.

Project Information



Location:	Tay Ninh Province (South Viet Nam)
Duration:	July 2020 – June 2025
Approving unit:	Tay Ninh People's Committee
Key Implementing Partner:	Department of Industry & Trade in Tay Ninh
Objective:	Support the sustainable energy transition through commercially viable energy efficiency and renewable energy solutions.
Target sector:	Textile & Apparel
Industrial Parks:	Phuoc Dong, Thanh Thanh Cong and Trang Bang
Brands Engaged:	H&M, Lululemon, Adidas, Puma, Gap, Lacoste, Nike and more

Key Deliverables



Energy Audits

**Greenhouse Gas
Inventories**

38 companies

**Tailored Emissions
Reduction Roadmap**

292,000t CO₂e in 5
years

**Energy Management
trainings**

200 Certified Energy
Managers

**Communication
Products**

Reports. Podcasts,
Documentaries

Energy and Carbon Emissions Reduction Solutions



Short term solutions

Behavioral change

Zero Investment

Energy saving: 0.5-10 %

Applied by all companies

Medium term solutions

- Optimize Compressed Air System
- Cooling / Air Conditioning Improvements
- Energy Management and Monitoring
- Motor and Fan Efficiency

Minimum Investment: 50-80,000 USD

ROI: 1 year

Energy Saving: approx. 5 to 20 %

Applied by 15-20 companies

Long term solutions

- Ironing / Heat Press Efficiency
- Electrify Equipment
- Installing Solar Rooftop

Minimum Investment: 250,000 - 1 million USD

ROI: 3 - 5 years

Energy Saving: approx. 15 to 40 %

Applied by 5-6 companies

Energy Efficiency & Renewable Energy Solutions Implemented



Heat Recovery and Insulation in Eclat Fabrics



Energy Management and Monitoring Systems



Motor and Fan Efficiency in Eclat Fabrics



Solar Rooftop on Gain Lucky

Case Study



50 million shoes/year for Adidas

33 hectares

9000+ employees

Applied all recommended Energy Efficiency Solutions :

- Higher efficiency motors, fans, air cons
- Efficient air compressors
- Heat pumps
- Air leak remediation
- Energy management system
- Solar roof top

Saves 7,267 tCO₂e per year (25.3% of total emissions)

Plans to install 7000KWp solar roof top this year

Additional savings up to 5000tCO₂e/year expected

Reports and Tools



GHG Inventories for Textiles and Dyeing Sector

Energy Transition Pathway towards Net Zero for Tay Ninh province

Financing Decarbonisation in the Commercial and Light Industry Supply chains



5 Trainings of Trainers conducted

200 Energy Managers Certified

Ministry of Industry and Trade Certifications

5 days online training in partnership with GIZ



GHG emissions calculator tool

Podcasts

Documentaries in partnership with VTV

Discussions at COP28 and COP29

Events – Sustainable finance, NDCs, Energy Transition

Opportunities, Challenges, Lessons learnt



2021-2024, the province saved 537.2 million kWh of electricity: Director of Department of Industry and Trade, Tay Ninh

Opportunities

- Commitment from the Government on Net Zero ambition
- Strong support from local governments
- Alignment with local government's sustainable strategy
- Strong brand engagement

Challenges

- Limited commitment from suppliers
- Regulatory hurdles
- Smaller suppliers struggle with decarbonisation due to limited expertise, funding, and reliance on buyers.
- Financing gap for SMEs.

Lessons learnt

- Support from local government is key to success
- Build brand engagement
- Huge demand for capacity building from suppliers & brands on target setting and decarbonization strategies
- Regular communication with partners
- Strong trade partners like VCCI, VITAS

Next Steps

- Expanding audits to 300 more companies in various provinces
- New sectors added: food & beverage
- Partnering with financial institutions
- Promoting solutions such as heat pumps and electrification
- Open to partnerships and collaborations

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WWF, 28 rue Mauverney, 1196 Gland, Switzerland. Tel. +41 22 364 9111

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