



# CASE STUDY

2025

**steel-a-thon**  
Prove your Metal  
Season XII 2025

# Case Title

Tata Steel UK – Innovating  
for a Sustainable Future

### **1.To tin or not to tin, that is the question? – utilisation of tinplate packaging scrap steel in electric arc furnace (EAF) technology**

What is the current state of the global detinning market and what is the cost/benefit business case for detinning of post-production (clean) and post-consumer (dirty) scrap for use in Tata Steel's upcoming electric arc furnace at Port Talbot? Understanding of the main global detinning suppliers, common technologies, cost/benefit and potential for Tata Steel's Port Talbot site, and requirements for UK supply chain. Identification of any alternative tin-free coating technologies for packaging steel.

### **2.Sustainable alternatives for fire-safe building construction**

Is there a business case for conversion of organic components used in Tata Steel UK products (e.g. paints, foams etc) to fire-safe sustainable, non-red listed alternatives? Examination of the case for moving to fire-safe sustainable alternatives for Tata Steel UK paints (e.g. Colorcoat [Colorcoat | Tata Steel UK](#)) and foams (e.g. building systems [Construction | Tata Steel UK](#), Catnic [Buy Catnic Steel Lintels | Nationwide Delivery Available | Catnic](#)) and their components, using chemicals not included on the ILFI red list (<https://living-future.org/red-list/>).

### **3.Supporting solar energy generation in desert conditions**

What is the case for utilising Tata Steel products, such as Magizinc coated steels for solar panel frame applications, in desert environments in the Middle East and Africa? What are the opportunities for growth in these regions and who are currently the main suppliers? Are there any limitations to development of markets, e.g. regulation?