Proposal to TSMC: Global AI Efficiency and Fair-Access Manufacturing Framework

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1. Introduction

The global AI-hardware ecosystem has reached a point of imbalance.
Unprecedented compute demand, concentrated manufacturing access, and rising human-workload pressure have created conditions that are no longer sustainable.

This proposal outlines a **non-commercial, credit-only initiative** that would position **TSMC** as the world leader in *fair, sustainable, and efficiency-driven AI manufacturing*—empowering engineers, stabilising operations, and opening the door to a new era of ethical innovation.

2. The Core Problem

- A small number of corporations—chiefly **Nvidia**—currently **dominate access to TSMC's most advanced fabrication nodes (3 nm / 2 nm)**.

- Companies with their own potentially superior GPU or accelerator designs are **often unable to fabricate them on equal footing**.

- Consequently, many are **forced to purchase Nvidia GPUs**, which already utilise those leading-edge nodes. This means they must **adopt Nvidia's architecture** rather than bring their own innovations to market.

- Many engineers and organisations quietly express **frustration with this structural dependency**, knowing that their own designs could outperform Nvidia's if equal access were available.

This **concentration of production demand** places heavy pressure on TSMC's workforce and fuels energy-intensive manufacturing cycles that strain global power grids.

3. Evidence of Untapped Efficiency

- **Google's Tensor Processing Unit (TPU)** already demonstrates higher performance-per-watt than Nvidia's GPUs, even while produced on *older* 5 nm / 7 nm nodes.

- If fabricated on **3 nm or 2 nm**, such architectures could cut energy consumption by

50–70 %, lower cooling costs by **up to 40 %**, and save billions in AI-infrastructure expenditure.

- **If Google can make a TPU more cost-friendly than an Nvidia GPU, then what is stopping Google from integrating TPU efficiency into an actual GPU?** The only barrier is fabrication access. Fair node allocation would allow Google's engineers—and many others—to merge TPU efficiency with GPU flexibility, creating hardware that is both cheaper and vastly more sustainable.

4. Human and Operational Impact

At the heart of this issue are **people**—TSMC's engineers and technicians, the *unsung heroes of AI*.
Their precision and endurance make global intelligence possible, yet current demand concentration places immense stress on them:

- Compressed delivery timelines,
- Continuous high-pressure production cycles,
- Limited recovery time between contracts.

Implementing this framework would:

1. **Distribute workload** across more diverse clients, reducing production peaks.
2. **Stabilise timelines** while still fulfilling contractual obligations.
3. **Create room to hire and train new engineers** under sustainable conditions.
4. **Institutionalise a human-workload review**, verifying that each contract has adequate personnel and time before approval.

This protects both productivity and human wellbeing, ensuring that technological progress never outpaces ethical responsibility.

5. Open Access and Equal Opportunity

Under the **Global AI Efficiency Framework**, *any qualified company or design team* could submit a GPU or accelerator design to TSMC.

Every submission would undergo the same transparent engineering review,

assessing: ● Design feasibility and efficiency metrics,

- Environmental impact,
- Workforce and scheduling implications.

If approved, the design proceeds to fabrication under **equal-access conditions**. No company is limited by favoritism—only by its **expertise, readiness, and available capital** to proceed.

This system rewards innovation and merit, not scale or exclusivity, and it unleashes a global wave of hardware creativity.

6. Proposal Summary

TSMC can lead a new industrial paradigm by:

1. Allocating a portion of advanced-node capacity (3 nm / 2 nm) to multi-vendor AI-chip fabrication.
2. Embedding **efficiency + human-workload** criteria into manufacturing reviews.
3. Establishing clear **sustainability and fairness benchmarks** for all participants.
4. Recognising designers who achieve record performance-per-watt or exemplary labour standards.

A limited pilot—one wafer line or shared fabrication slot—would validate the framework with minimal operational risk.

7. Expected Impact

Impact Area	Anticipated Outcome
Energy Relief	Reduced AI-energy peaks and lighter grid stress.
Economic Efficiency	Lower AI-training and infrastructure costs.
Human Protection	Sustainable workloads, improved morale, and job growth.
Innovation Diversity	Freedom for multiple firms to realise their own designs.
Environmental Progress	Tangible step toward net-zero compute growth.
Policy Influence	Template for global *AI Efficiency and Ethical Manufacturing Guidelines.*

8. Philosophical Foundation

AI should not be defined by who controls the most electricity or fabrication slots—it should be defined by those who create the most efficient and humane intelligence.

TSMC has the power to realign this balance: not by changing *what* it manufactures, but by transforming *how* it manufactures—ushering in a new era of fair, ethical, and sustainable technological progress.

9. Non-Commercial Intent

This proposal is shared freely.
I seek **no financial compensation**, only acknowledgment as the original author if these concepts influence TSMC's future direction.

My purpose is to celebrate and protect TSMC's engineers and to ensure innovation remains a collective human achievement rather than a monopolised asset.

10. Closing Statement

If Google can achieve extraordinary TPU efficiency on older nodes, imagine the breakthroughs possible if engineers everywhere had equal access to 3 nm and 2 nm fabrication.
They could integrate TPU-level efficiency into GPU-class devices, lower AI's environmental cost, and free companies from forced dependency on monopolised designs. TSMC can make this transformation real—balancing technology, humanity, and fairness in one decisive act of leadership.

Ethical Declaration

The human contribution to artificial intelligence—the engineers, technicians, and creative minds who bring it to life—cannot be assigned a monetary value.
I therefore share this framework freely, without payment request.
My only wish is that the people whose labour sustains AI are recognised, protected, and treated with the dignity they deserve.

Disclaimer – Actual Results May Vary

The projections and outcomes described in this proposal represent logical expectations based on current industry conditions.
Actual results will vary depending on implementation strategy, global market forces, fabrication capacity, and policy alignment.
These variations do not diminish the core principle of this framework: that fairness, efficiency, and respect for human labour can and should coexist in AI manufacturing.

License and Attribution Notice

With deep respect and admiration,
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Signature: 

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