

The footprint evolution

The footprint



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What is the footprint of a Company?

Even if is represented by a map it is not exactly a map.

The footprint is what the map shows. **A geographic distribution of productive plant and, sometimes, of engineering centers.** In it are indicated the allocations of **the main products** and, in the precise cases, the **production capacity** or/and the **headcount** of each plants.

In the footprint, there is also, nonvisible in the official ones but for sure in the work versions, the evolution of the plan. So, **Plant creation or transformation, closures, planned transfer** and so on.

In other words, the **footprint management** plus the **capacity vs demand analysis** are the tools that Industrial strategy uses to define the evolution of the Company Manufacturing and the next Governance decision drivers.

Stellantis vehicle footprint

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Stellantis Powertrain footprint 2021

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Footprint management



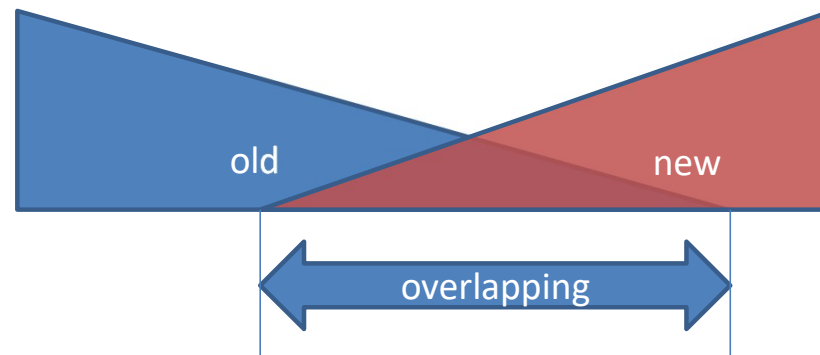
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- The footprint management is one of the tasks of the Industrial Strategy.
- The natural evolution of a footprint is driven by the product innovation. When a new product must be implemented in a Plant, Industrial strategy analyzes the optimal allocation.
- Other times, the success of a product require a capacity increase, whose allocation must be equally optimized.
- In the past the **Golden footprint rule** was “**Two products in a Plant, two plants for a product**” aiming to the robustness and reliability.
- Then attempt to use the Ricardo’s theory to specialize a plant for a technology has been pursued but frustrated by the current necessity to be carbon neutral and minimize the logistic impact.
- Finally, the electric transition is pushing a revolution so dramatic that, in PWT footprint, the social aspects play a crucial role.

Phase in –Phase out problems

Starting from an existing footprint one of the major issue, is that is impossible replace a product with his successor.

The fact is that what we call phase in (of new product)- phase out (of old product) cannot be instantaneous. There is always a period in which the two products are in parallel and normally the conversion of the plant cannot be done during the normal work.



The retooling time

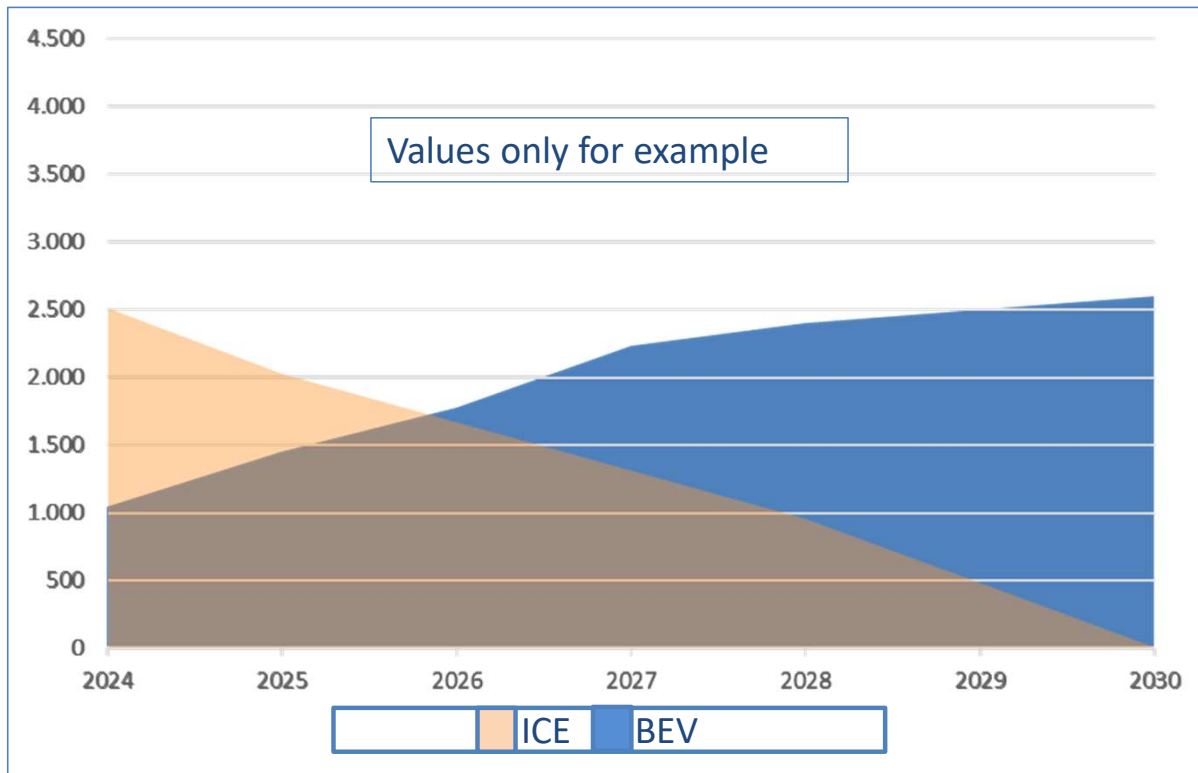
In the normal case the retooling of a plant requires :

1. An old system dismantling (apart the machinery to be reused that has to be temporarily stocked somewhere) that takes minimum three months
2. Consider some months for refurbishment (minimum three)
3. Consider six months for the installation and another three plus three months for the product validation.



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The electrical transition



The dramatic ICE powertrain transition to electric is a typical phase in-phase out event but so disruptive and complex that cannot be treated with usual procedures.

The approach of the Automotive Business therefore has been the gradual transformation of the footprint.

It is not an easy task due to the Plant loads of the ICE and BEV are not equal as the market segmentation