

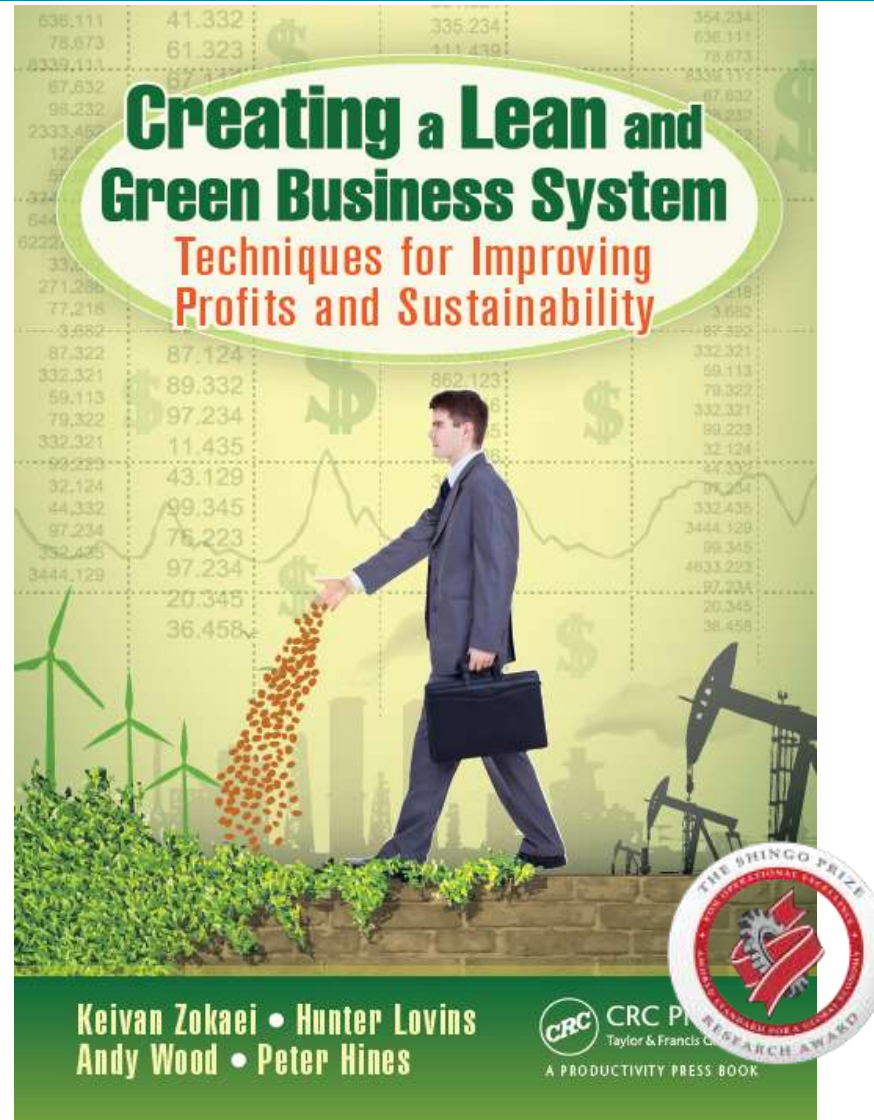




# Creating a Lean and Green Business System

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# The beginning

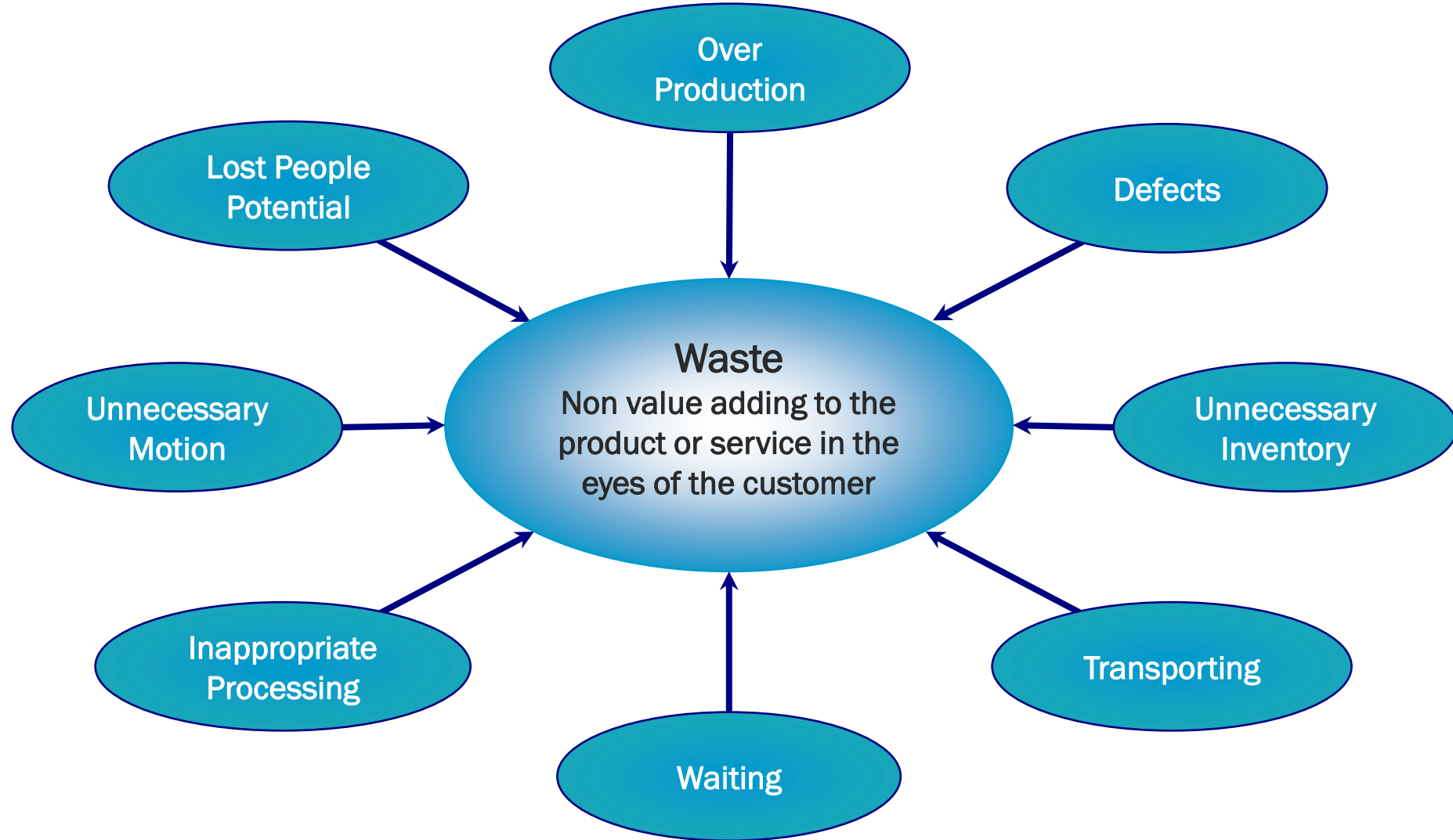
## Lean



## Green



## The Eight Lean Wastes





## The Eight Green Wastes

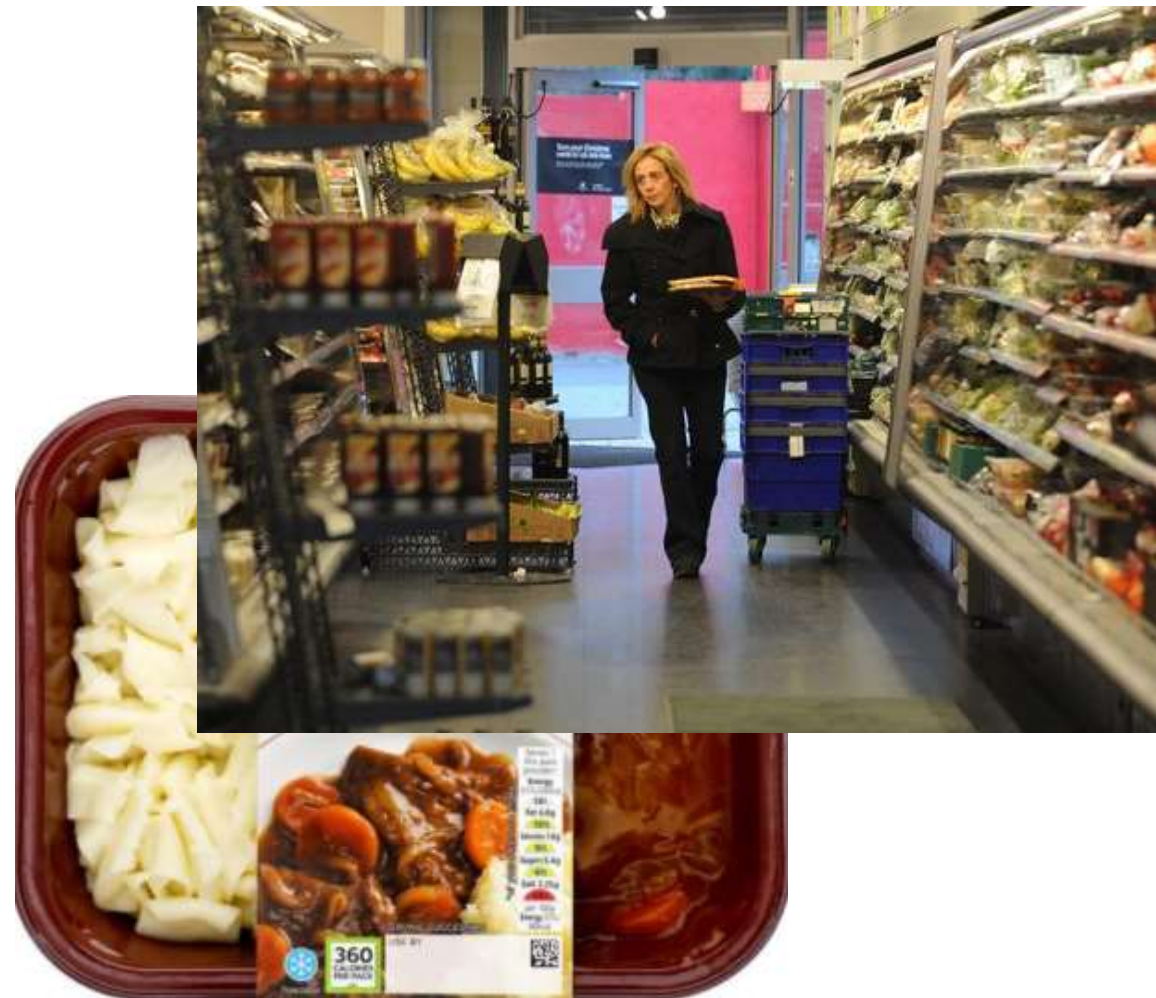


## Did this basic concept work?



- YES!
- A toolkit was created that, in numerous large and medium size companies, 10% to 30% of their environmental footprint could be eliminated in a single week
- A very large FMCG company made this a compulsory, annually recurring, ritual

Benefit	%	Improve
Food waste	50%	1,000 T
CO <sub>2</sub>		15,000 T
Water		20 osp
Lower costs	8%	£Millions
Sales uplift	4%	£Millions
Productivity increase	7%	
Inventory reduction	25%	





- ▶ Intervention was so successful that M&S began its 11 years journey
- ▶ Involved thousands of suppliers as well as M&S themselves
- ▶ Created a Lean & Green toolkit for M&S supply chain which they have made public very recently: [here](#).
- ▶ Created a scorecard for assessing Lean and Green maturity and to enable the entire supply base to create roadmap and go on L&G journey
- ▶ They called it “System of Success” which combined three pillars: Lean, Environment and Ethical

<b>FOOD WASTE</b>	Donations of surplus in meals equivalent <a href="#">Read more</a>	<b>11.8m</b> <i>meals</i>	+126% on 2019/20
<b>PACKAGING</b>	Percentage of packaging classified as being easily recyclable <a href="#">Read more</a>	<b>87%</b>	+10% on 2019/20
<b>WASTE TO LANDFILL</b>	Percentage sent to landfill <a href="#">Read more</a>	<b>Zero</b>	Zero in 2019/20
<b>M&amp;S GREENHOUSE GAS EMISSIONS (CO<sub>2</sub>e)</b>	The gross carbon dioxide emissions from M&S operated stores, offices, warehouses and delivery fleets worldwide <a href="#">Read more</a>	<b>298,000</b> <i>tonnes CO<sub>2</sub>e</i>	-13% on 2019/20

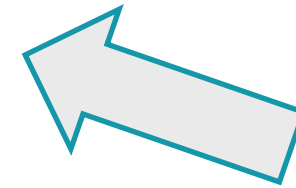


# Can L&G become a genuine movement?

Needs Universal Principles

## Universal Principle that Lean Offered?

	GM Framingham, USA	NUMMI (Joint Venture between Toyota and GM in Fremont, USA)	Toyota Takaoka, Japan
Productivity Hours/car	<b>31</b>	<b>19</b>	<b>16</b>
Assembly Quality Defects/car	<b>135</b>	<b>45</b>	<b>45</b>
Average Inventory of Parts	<b>2 weeks</b>	<b>2 days</b>	<b>2 hours</b>

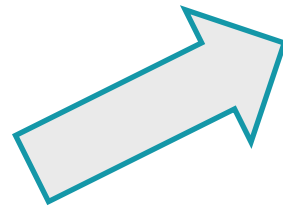


The best quality  
is also  
cheapest in  
manufacturing

The Machine that Changed the World (1989)

## The Machine that Changed the World Again?

The greenest is also the most  
efficient and the best quality  
car maker



Ranking	T CO2 / vehicle mnfg
Toyota	0.86
GM	0.93
Fiat S.P.A.	0.98
Volkswagen	1.05
Ford	1.06
Honda	1.10
Daimler (Mercedes)	1.53

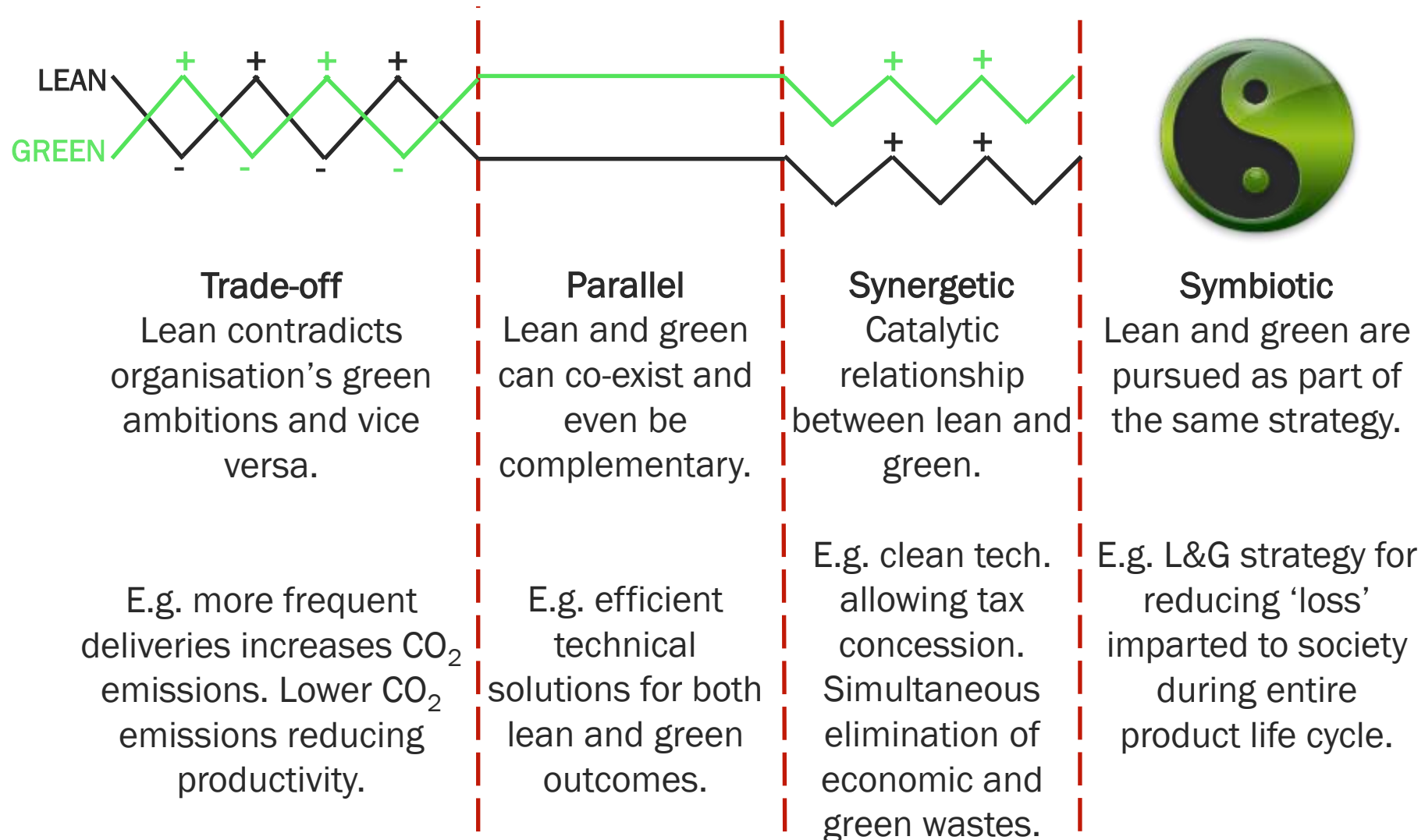


## Monozukuri

- ▶ *Manufacturing in harmony*

## Hitozukuri

- ▶ *Lean is about creating better people*





[www.sappartners.com](http://www.sappartners.com)

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