































































Hult, G. Tomas M. (2011). Market-focused sustainability: market orientation plus!. *Journal of the Academy of Marketing Science*, 39:1-6.

Iacobucci, D., Ostrom, A., & Grayson, K. (1995). Distinguishing service quality and customer satisfaction: the voice of the consumer. *Journal of Consumer Psychology*, 4(3), 277-303.

Kärnä, J., Hansen, E., & Juslin, H. (2003). Social responsibility in environmental marketing planning. *European Journal of Marketing*, 37(5/6), 848-871.

Kilbourne, W.E., Beckmann, S.C., & Thelen, E. (2002). The role of the dominant social paradigm in environmental attitudes: a multi-national examination. *Journal of Business Research*, 55(3), 193–204.

Kleindorfer, P. R., Singhal, K., & Wassenhove, L. N. (2005). Sustainable operations management. *Production and Operations Management*, 14(4), 482-492.

Kotler, P., Kartajaya, H., & Setiawan, I. (2010). *Marketing 3.0: From products to customers to the human spirit*. John Wiley & Sons.

Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. *Journal of Marketing*, 75, 132–135.

Lash, J., & Wellington (2011). Competitive advantage on a warming planet. *Harvard Business Review*, 85(3), 211-238.

Leonidou, C.N. & Leonidou, L.C. (2011). Research into environmental marketing/management: a bibliographic analysis. *European Journal of Marketing*, 45(1/2), 68-103.

Leonidou, C. N., Katsikeas, C. S., & Morgan, N. A. (2013). “Greening” the marketing mix: do firms do it and does it pay off? *Journal of the Academy of Marketing Science*, 41(2), 151-170.

Lovell, H. & Liverman, D. (2010). Understanding carbon offset technologies. *New Political Economy*, 15(2), 255-273.

MacArthur, E. (2014). Towards the circular economy: Accelerating the scale-up across global supply chains. *Technical Report, World Economic Forum*. <http://www.weforum.org/reports/towards-circular-economy-accelerating-scale-across-global-supply-chains>.

McDaniel, S. W., & Rylander, D. H. (1993). Strategic green marketing. *Journal of Consumer Marketing*, 10(3), 4-10.

McDonagh, P. & Prothero, A. (2014). Sustainability marketing research: past, present and future. *Journal of Marketing Management*, 30(11-12), 1186-1219.

Menguc, B., Auh, S., & Ozanne, L. (2010). The interactive effect of internal and external factors on a proactive environmental strategy and its influence on a firm's

- performance. *Journal of Business Ethics*, 94(2), 279-298.
- Menon, A., & Menon, A. (1997). Enviropreneurial marketing strategy: the emergence of corporate environmentalism as market strategy. *Journal of Marketing*, Jan 1, 51-67.
- Miles, M. P., & Covin, J. G. (2000). Environmental marketing: a source of reputational, competitive, and financial advantage. *Journal of Business Ethics*, 23(3), 299-311.
- Netemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). *Scaling procedures: Issues and applications*. London: Sage.
- Nunnally, J. C., & Bernstein, I. H. (1994). The assessment of reliability. *Psychometric theory*, 3, 248-292.
- Ottman, J. A. (1993). *Green marketing*. Lincolnwood, USA: NTC Business Books.
- Papadas, K.K. & Avlonitis, G.J. (2014). The 4 C's of environmental business: Introducing a new conceptual framework. *Social Business*, 4(4), 345-360
- Peattie K. (1995) *Environmental Marketing Management*. London: Pitman.
- Peattie, K. (1999) Trappings versus substance in the greening of marketing planning, *Journal of Strategic Marketing*, 7, 131-148.
- Peattie, K. & Crane, A. (2005) Green Marketing: legend, myth, farce or prophesy? *Qualitative Market Research: an International Journal*, 8(4), 357-370.
- Polonsky, M. J. (1995). A stakeholder theory approach to designing environmental marketing strategy. *Journal of Business & Industrial Marketing*, 10(3), 29-46.
- Polonsky, M. J., & Rosenberger, P. J. (2001). Reevaluating green marketing: a strategic approach. *Business Horizons*, 44(5), 21-30.
- Polonsky, M.J. (2011) Transformative green marketing: impediments and opportunities. *Journal of Business Research*, 64, 1311-1319.
- Porter, M.E. & Kramer, M.R. (2011). Creating Shared Value. *Harvard Business Review*, 89(1-2), 62-77.
- Prothero, A. (1998). Green Marketing: The 'Fad' That Won't Slip Slide Away, (Editorial). *Journal of Marketing Management*, 14, 507-512.
- Pujari, D., Wright, G., & Peattie, K. (2003). Green and competitive: influences on environmental new product development performance. *Journal of Business Research*, 56(8), 657-671.
- Ramus, C. A. (2001). Organizational support for employees: Encouraging creative ideas for environmental sustainability. *California Management Review*, 43(3), 85-105.
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (1991). Criteria for scale

selection and evaluation. *Measures of Personality and Social Psychological Attitudes*, 1(3), 1-16.

Rossiter, J. R. (2002). The C-OAR-SE procedure for scale development in marketing. *International Journal of Research in Marketing*, 19(4), 305-335.

Sharma, S., & Vredenburg, H. (1998). Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. *Strategic Management Journal*, 19(8), 729-753.

Shrivastava, P. (1995). The role of corporations in achieving ecological sustainability. *Academy of Management Review*, 20(1), 936-960.

Steg, L. & Vlek, C. (2009). Encouraging pro-environmental behavior: An integrative review and research agenda. *Journal of Environmental Psychology*, 29, 309-317.

Stoeckl, V.E. & Luedicke M.K. (2015) Doing well while doing good? An integrative review of marketing criticism and response. *Journal of Business Research*, 68(12), 2452-2463.

Turker, D. (2009). Measuring corporate social responsibility: A scale development study. *Journal of Business Ethics*, 85(4), 411-427.

Unruh, G., & Ettenson, R. (2010). Winning in the green frenzy. *Harvard Business Review*, 88(11), 110-116.

Wells, V. K., Manika, D., Gregory-Smith, D., Taheri, B. & McCowlen, C. (2015). Heritage tourism, CSR and the role of employee environmental behaviour. *Tourism Management*, 48, 399–413.

Zhu, Q., & Sarkis, J. (2004). Relationships between operational practices and performance among early adopters of green supply chain management practices in Chinese manufacturing enterprises. *Journal of Operations Management*, 22(3), 265-289.

**Table 1**  
Related constructs on green/environmental marketing

Construct	Overview	Green Marketing Orientation (GMO)
<i>Enviropreneurial marketing</i> Menon & Menon (1997)	A multiple stakeholder view - Integration of environmental goals within corporate strategy.	This strategic approach is reflected in the strategic dimension of GMO which also includes the perspective of innovation, technology and market research.
<i>Green marketing strategy</i> Fraj et. al (2011)	A two-dimensional construct consisting of <i>process-oriented market environmental actions</i> and <i>market-oriented environmental actions</i> . The former refers to internal processes such as eco-design and green logistics. The second refers to short-term focus on green advertising and use of eco-labels.	The approach of GMO is that such activities should be considered as tactical, short-term activities based on the nature of their decisions. This clarification helps in better understanding the functionality of a green marketing strategy and the separation of strategic, tactical and internal green marketing activities.
<i>Green marketing programs</i> Leonidou & Katsikeas (2013)	Focus on the marketing mix and the minimization of its negative environmental impact.	Tactical dimension addresses this marketing mix approach – In addition, GMO provides a holistic view of a green marketing strategy which brings together strategic, tactical and internal marketing activities.



**Table 2**  
Scale development process

Stages of scale development process	Details
Study 1 – Construct definition and content domain	<ul style="list-style-type: none"> <li>• 22 Interviews</li> <li>• Qualitative analysis of interview transcripts to clarify the construct and its dimensions</li> <li>• This process results in the confirmation of the three-dimensional construct according to the literature review and provides novel insights about the organizational dimensions of a successful green marketing strategy.</li> <li>• Operational definitions of construct and its dimensions</li> </ul>
Study 2 – Item generation and expert review	<ul style="list-style-type: none"> <li>• Generation of 60 items based on 3 dimensions</li> <li>• 6 expert marketing practitioners and 4 expert marketing faculty members judge items for content and face validity</li> <li>• 46 items are retained for further elimination</li> <li>• 5 marketing doctoral researchers judge items for dimensionality</li> <li>• 36 items are retained for the next step</li> </ul>
Study 3 – Scale purification and item refinement <ul style="list-style-type: none"> <li>• Initial reliability assessment</li> <li>• Factor loadings</li> <li>• Dimensionality</li> <li>• Item refinement and reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Survey to 103 manager-level executives</li> <li>• 23 items meet the psychometric criteria and are retained for the next and final step</li> </ul>
Study 4 – Finalization of the scale <ul style="list-style-type: none"> <li>• Reliability assessment and dimensionality</li> <li>• Confirmatory factor analysis</li> <li>• Convergent validity</li> <li>• Discriminant validity</li> <li>• Nomological validity</li> </ul>	<ul style="list-style-type: none"> <li>• Survey to 226 firms</li> <li>• 21 items meet the psychometric criteria and are retained for the validity tests</li> <li>• Validation of the scale</li> <li>• Establishment of nomological validity</li> </ul>

**Table 3**  
Study 1 - indicative quotes from the qualitative study

Dimensions	Quotes
<i>Strategic Green Marketing Orientation</i>	<i>"...in our case, the environmental marketing strategy is identical to the general corporate strategy and this is the reason for naming our forthcoming business plan 'the sustainability business plan'."</i> – CEO, Company A
<i>Tactical Green Marketing Orientation</i>	<i>"...we are trying to use raw materials and ingredients that are eco-friendly, as well as recyclable, to create natural products ... we're not transferring the extra cost for a green product to the customer via an increase in price."</i> - Marketing Director, Company B
<i>Internal Green Marketing Orientation</i>	<i>"...the pollination of our values and philosophy to our people is a very important stage of our green marketing strategy ... we are talking about holistic green marketing; every employee should be aware of our green marketing strategy."</i> - Head of Sustainability, Company C

**Table 4**  
Study 1 - green marketing orientation dimensions

Dimensions	Definitions
<i>Strategic Green Marketing Orientation</i>	The extent to which organizations integrate the environmental imperative in strategic marketing decisions.
<i>Tactical Green Marketing Orientation</i>	The extent to which organizations embody environmental values in tactical marketing decisions.
<i>Internal Green Marketing Orientation</i>	The level of assimilation of corporate environmental values by all internal stakeholders.

**Table 5**  
Study 3 - sample characteristics

		(N=103)
Market	B2C	68.9%
	B2B	31.1%
Type	Domestic	59.2%
	Multinational	40.7%
Job post	Product/Marketing	56.3%
	Other managerial post	43.6%
Professional experience	> 5 years	100%

**Table 6**

Study 4 - sample characteristics

		(N=226)
Market	B2C	40.2%
	B2B	29.2%
	Both	30.5%
Type	Domestic	60.6%
	Multinational	39.3%
Sector	FMCG	26.9%
	Services	25.6%
	Industrial Products	19.9%
	Wholesalers & Retailers	13.7%
	Construction-Remaking-Other	13.7%
Age of company (in years)	1-5	7.5%
	6-10	10.1%
	11-20	15%
	21-40	23.8%
	>40	43.3%
Number of employees	11-50	23%
	51-250	30.5%
	>250	46.4%
Job title	Marketing manager	50.4%
	Product manager	22.1%
	CSR/Sustainability manager	12.8%
	CEO	14.6%
Age of respondents (in years)	21-30	27.8%
	31-40	44.2%
	41-50	22.5%
	51-60	3.9%
	>60	1.3%

**Table 7**  
Study 4 - scale items, descriptive statistics, and factor loadings

Factor item	Range	Mean	SD	Factor loading
<i>Strategic Green Marketing Orientation (alpha=.94)</i>				
1. We invest in low-carbon technologies for our production processes.	1-7	4.19	2.02	.82
2. We use specific environmental policy for selecting our partners.	1-7	3.83	1.90	.77
3. We invest in R&D programs in order to create environmentally friendly products/services.	1-7	4.15	1.92	.76
4. We make efforts to use renewable energy sources for our products/services.	1-7	4.33	1.93	.74
5. We have created a separate department/unit specializing in environmental issues for our organization.	1-7	3.55	2.18	.73
6. We participate in environmental business networks.	1-7	3.99	2.05	.70
7. We engage in dialogue with our stakeholders about environmental aspect of our organization.	1-7	3.67	1.89	.68
8. We implement market research to detect green needs in the marketplace.	1-7	3.38	1.98	.64
9. Among other target markets, we also target to environmentally-conscious consumers.	1-7	4.14	1.90	.64
<i>Tactical Green Marketing Orientation (alpha=.78)</i>				
1. We encourage the use of e-commerce, because it is more eco-friendly.	1-7	3.79	2.01	.78
2. We prefer digital communication methods for promoting our products/services, because it is more eco-friendly.	1-7	4.88	1.73	.72
3. We apply a paperless policy in our procurement where possible.	1-7	4.61	1.87	.67
4. We use recycled or reusable materials in our products/services.	1-7	4.63	1.83	.53
5. We absorb the extra cost of an environmental product/service.	1-7	4.44	1.90	.52
<i>Internal Green Marketing Orientation (alpha=.92)</i>				
1. Exemplar environmental behavior is acknowledged and rewarded.	1-7	3.30	1.85	.80
2. Environmental activities by candidates are a bonus in our recruitment process.	1-7	2.73	1.65	.76
3. We have created internal environmental prize competitions that promote eco-friendly behavior.	1-7	2.43	1.67	.75
4. We form environmental committees for implementing internal audits of environmental performance.	1-7	3.03	1.90	.63
5. We organize presentations for our employees to inform them about our green marketing strategy.	1-7	3.25	1.86	.60
6. We encourage our employees to use eco-friendly products/services.	1-7	4.00	1.91	.57
7. Our employees believe in the environmental values of our organization.	1-7	4.19	1.73	.55

**Table 8**  
Study 4 – discriminant validity test

Construct	AVE	Squared Correlations		
		1	2	3
1. SGMO	.62			
2. TGMO	.53	.49		
3. IGMO	.61	.52	.45	
4. CSR	.63	.52	.45	.46
5. EO	.67	.50	.45	.49
6. MP	.60	.11	.11	.09

**Table 9**  
Study 4 - model fit statistics of the scales used in the nomological validity test

Measure	$\chi^2$	df	RMSEA	GFI	CFI
CSR	33.9	14	.08	.96	.98
EO	75.3	20	.10	.92	.97
MP	17.8	5	.10	.96	.98

**Table 10**  
Study 4 – statistics of for the paths of nomological validity test

Path	$\beta$	S.E.	t-value
CSR → SGMO	.45	.14	3.08 **
CSR → TGMO	.24	.21	.86
CSR → IGMO	.08	.15	.44
EO → SGMO	.51	.14	3.50***
EO → TGMO	.47	.21	2.26*
EO → IGMO	.78	.15	4.17***
SGMO → MP	.25	.12	2.34*
TGMO → MP	.20	.12	2.41*
IGMO → MP	-.04	.08	-.26

Notes: All path coefficients are standardized estimates.

\*\*\*  $p < .001$

\*\*  $p < .01$

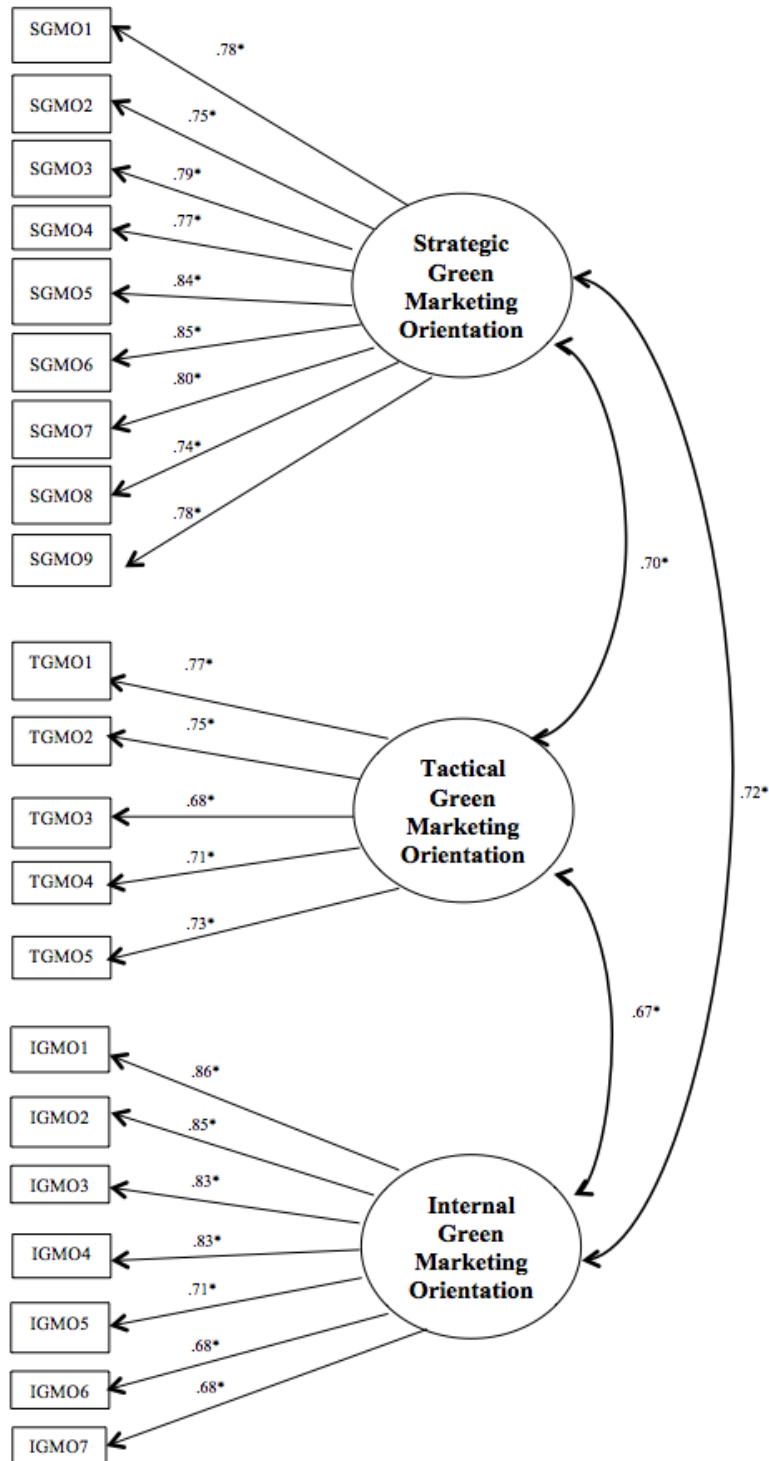
\*  $p < .05$

**Table 11**  
Study 4 – correlations among and AVEs of constructs of nomological validity test

Construct	1	2	3	4	5	6
1. SGMO						
2. TGMO	.70					
3. IGMO	.72	.67				
4. CSR	.72	.67	.68			
5. EO	.71	.67	.70	.79		
6. MP	.33	.33	.30	.38	.35	
AVE	.62	.53	.61	.63	.67	.60

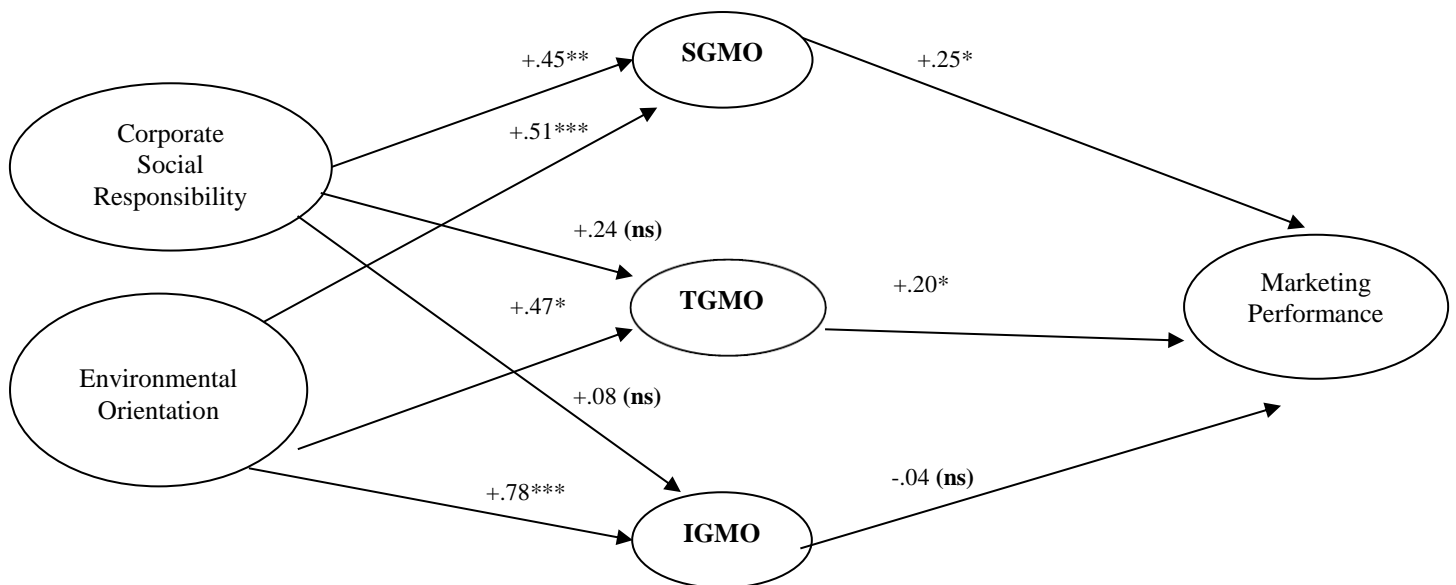
Notes: All correlation are significant at the 0.01 level.

**Figure 1**  
Study 4 - CFA model and results for the green marketing orientation scale



Notes: All coefficient values are standardized and appear above the associated path.  
\* $p < .001$

**Figure 2**  
Study 4 - test of the nomological validity of the scale



Notes: All path coefficients are standardized estimates.

\*\*\*  $p < .001$

\*\*  $p < .01$

\*  $p < .05$

## WEB APPENDIX

### A1 GMO initial items list and progression in Study 1-4

DIMENSION 1	STUDY 1	STUDY 2	STUDY 3	STUDY 4
<b>STRATEGIC GREEN MARKETING ORIENTATION</b>				
<b>We invest in R&amp;D programs in order to create environmentally friendly products/services.</b>	✓	✓	✓	✓
We take into consideration natural environment in our logistics (e.g. reverse logistics).	✓			
Waste management is an important project for our organization.	✓			
We use ‘clean’ transportation.	✓			
We take into consideration natural environment for the construction of our buildings.	✓			
Our premises are certified with green building standards.	✓			
<b>We have created a separate department/unit specialized in environmental issues for our organization.</b>	✓	✓	✓	✓
We have created interdepartmental committees for the development of our environmental marketing strategy.	✓			
We participate in ‘green’ alliance schemes with other organizations.	✓	✓		
We prefer to reuse rather than repurchase products.	✓			
We prefer to lease rather than buy corporate vehicles.	✓			
We participate in synergies related to the product recycling process.	✓			
Energy and water saving is important for us.	✓			
We use environmental management systems.	✓			
<b>We invest in low-carbon technologies for our production processes.</b>	✓	✓	✓	✓
<b>We participate in environmental business networks.</b>	✓	✓	✓	✓
We believe that environmental strategy constitutes an important driver for innovation.	✓	✓		
<b>We use specific environmental policy for selecting our partners.</b>	✓	✓	✓	✓
We develop business projects with other organizations for environmental management.	✓			
<b>We engage in dialogue with our stakeholders about environmental aspects of our organization.</b>	✓	✓	✓	✓
Green marketing is a central pillar of our sustainability strategy.	✓	✓		
We implement strategic actions for the reduction of our environmental footprint.	✓			
We buy locally-sourced products to reduce our carbon footprint.	✓			
We develop new environmental products/services.	✓	✓	✓	
<b>We use renewable energy sources for our products/services.</b>		✓*	✓	✓



<b>DIMENSION 2 TACTICAL GREEN MARKETING ORIENTATION</b>	<b>STUDY 1</b>	<b>STUDY 2</b>	<b>STUDY 3</b>	<b>STUDY 4</b>
<b>We use recycled or reusable materials in our products/services.</b>	✓	✓	✓	✓
We modify eco-labels to emphasize the environmental benefits.	✓	✓		
<b>Among other target markets, we also target environmentally-conscious consumers.</b>	✓	✓ **	✓ **	✓ **
We use specific environmental criteria for our suppliers.	✓			
<b>We prefer digital communication methods for promoting our products/services, because it is more eco-friendly.</b>	✓	✓	✓	✓
<b>We encourage the use of e-commerce, because it is more eco-friendly.</b>	✓	✓	✓	✓
<b>We implement market research to detect green needs in the marketplace.</b>	✓	✓ **	✓ **	✓ **
We provide information to our customers regarding important environmental issues.	✓	✓		
We sponsor events that promote environmental awareness.	✓	✓		
We are positioned in the market as a "green" brand.	✓			
We reduce our environmental cost by using economies of scale methods for our distribution.	✓			
We train our customers for activities related to environmental impact.	✓			
We communicate our "green" partnerships to our customers.	✓			
We publish corporate environmental reports.	✓	✓		
We allow access to the public with regards to our environmental impact.	✓	✓		
We believe that "greener" products should be charged higher.	✓			
We implement marketing programs aimed at environmental consciousness.	✓			
<b>We apply paperless policy in our procurement wherever possible.</b>	✓	✓	✓	✓
<b>We absorb the extra cost of an environmental product/service.</b>	✓	✓	✓	✓
We take into account the environmental impact when designing our distribution channels.	✓			
We communicate the "green" features of our products.	✓			
We use specific pricing policy for our green products/services.		✓ *		
We use eco-friendly means of transport for the distribution of our products/services.		✓ *		
<b>DIMENSION 3 INTERNAL GREEN MARKETING ORIENTATION</b>	<b>STUDY 1</b>	<b>STUDY 2</b>	<b>STUDY 3</b>	<b>STUDY 4</b>
We share environmental knowledge through internal workshops.	✓	✓	✓	
<b>We organize presentations for our employees in order to inform them about our green marketing strategy.</b>	✓	✓	✓	✓

We participate in educational programs regarding environmental management.	✓			
<b>Our employees believe in the environmental values of our organization.</b>	✓	✓	✓	✓
Our employees' behavior is identical to our corporate environmental values.	✓	✓		
Our employees participate in corporate environmental actions.	✓	✓		
<b>Exemplar environmental behavior is acknowledged and rewarded.</b>	✓	✓	✓	✓
<b>We form environmental committees for implementing internal audits of environmental performance.</b>	✓	✓	✓	✓
We communicate our environmental strategy with our employees through newsletters.	✓	✓		
<b>Environmental activities of candidates are a bonus in our recruitment process.</b>	✓	✓	✓	✓
We encourage our employees to use eco-friendly products/services.	✓			
We encourage our employees to use public transportation.	✓			
We aim to create "green" brand champions.	✓			
<b>We have created internal environmental prize competitions that promote eco-friendly behavior.</b>	✓	✓	✓	✓
We encourage our employees to share our "green" brand image in social media.	✓			
<b>We encourage our employees to use eco-friendly products/services.</b>		✓*	✓	✓

\* Item added at the end of Study 2 after experts' suggestion.

\*\* Item moved to Dimension 1 at the end of Study 2 after experts' suggestion.

*Note:* Some of the final items remained might be slightly rephrased in the final scale due to the purification/editing process throughout the studies.

## A2 Measure of the variables in the nomological validity test

Variable	Measurement
Corporate social responsibility (Turker, 2009)	Our company participates in activities which aim to protect and improve the quality of the natural environment. Our company makes investment to create a better life for future generations. Our company implements special programs to minimize its negative impact on the natural environment. Our company targets sustainable growth which considers future generations. Our company supports non-governmental organizations working in problematic areas. Our company contributes to campaigns and projects that promote the well-being of the society. Our company encourages its employees to participate in voluntarily activities. (Cronbach's alpha = .93)
Environmental orientation (Banerjee, 2002)	At our firm, we make a concerted effort to make every employee understand the importance of environmental preservation. Our firm has a clear policy statement urging environmental awareness in every area. Environmental preservation is a high-priority activity in our firm.

---

	<p>Preserving the environment is a central corporate value in our firm.  The financial well-being of our firm depends on the state of the natural environment.  Our firm has a responsibility to preserve the environment.  Environmental preservation is vital to our firm's survival.  Our responsibility toward environmental preservation is more important than our firm's responsibility to its customers, stockholders, and employees.  (Cronbach's alpha = .94)</p>
Marketing performance (Fraj et al., 2011)	<p>Corporate reputation  Alignment between company's offer and market expectations  Successful launching of new products onto the markets  Customer loyalty  Customer satisfaction  (Cronbach's alpha = .90)</p>

---