

(EMA)
 44 2007
 .(68) (%60.3) 41
 t-test
 EMA

Environmental
 Management Accounting (EMA)

EMA 1 .2009/5/11 2008/7/30

(Burrill *et al.*, 2002)

(Bebbington, 1997)

EMA

(2)

EMA

EMA

:

EMA

-1

-2

-3

-4

-5

2

(1999 4)

(2000 19)

(2007 18)

2003 52

4 21

2002 76

(/12)

(ICAA, 2002a)
GH Michell & Sons
(Deegan, 2002)
()

(Gale, 2005)

EMA (Parker, 2000)

EMA

(Burritt, 2004)

EMA

(EMA)
(Bartolomeo *et al.*, 2000)

(IFAC, 2005) (UNSD, 2001)

84

(Frost and Wilmshurst, 2000)

(Pojasek and Cali, 1991) (Rooney, 1993), (Pojasek, 1997), USEPA (2001), Loew (2003)

(METI, 2002)

(Kokubu and

Nakajima, 2004)

EMA

:

(Onishi *et al.*, 2006)

EMA

(Tanabe Seiyaku Co., Ltd.)

Kokubu and Nakajima

1998 . (EMA) :(IFAC, 1998)
 (EMAN) EMA
 1999 . Bennett and James, . (1998)
 2002 .(EMA)
 (EMA) 2004 .(EMA)
 2005 30 .
 .(EMA)
:EMA
 (Staniškis and .Stasiškienė, 2002)
 EMA (Xiaomei, 2004)
 .
 : (UNSD, 2003)
 -1
 -2 :
 (Mathews, 1997)
 -3 :
 -1
 -4
 -2
: Environmental Costs
 1995 – 1990 -3
 EMA
 Environmental Cost Accounting -4
 (ECA)
 .EMA (Osborn *et* EMA
 (USEPA, 1995) : *al.*, 2002)
 1986
 ()
 1992 .

(4) strongly agree (sa) (5) : 2007
 disagree (da) (2) agree (a)
 . strongly disagree (sda) (1)
 (Neutral) (3)

:(EMA) -1

:(Cost1) .(10-1) -2

()

:(Cost2) .(17 -11) -3 EMA

(68)

:(Cost3) .(22 -18) -4 44

(%60.3) 41

:(Cost4) .(27 -23) -5

"

(+6.105) t t .(30 -28)

.(+2.0211) t :

.(2)

:

EMA (SPSS V. 16)

(%61) :

(%24.4) :Descriptive Statistics -1

.(3) .(%17.1) Frequencies

:

.Mean

:Compare Means -2

One Sample Test t-test

Significant Difference

.(3)

(%56.1) :

Cronbach's)

(Alpha

(%19.5) : - (%60)

.(%26.8) (%17.1) (%26.8) (%29.3) (%19.5) (Sekaran, (%60)

.(1) .2003)

:

(%53.6) (%53.7)

.(3) .(%31.7) :40 0.05 %95

t t

(+2.0211)

(3) . (-2.0211)

(3.6585) (3.7073) " :H₀₁ :

(3.4634) (3.6585) (3.6585) (3.7805)
.(3.6098) (3.5122) (3.4878) (3.5122)
(3)

(%12.2)

.(5) .(%51.3)

" :H₀2 :

"
t
t (+6.812)
.(+2.0211)

.(5) .(2.3902)
" :H₀3 : .(4)

"
t
t (+6.519)
.(+2.0211) ()

(%7.3) (%70.8)
.(6) .(%7.3) (%65.8)
(%7.3) (%63.4)
(%7.3) (%58.6)
.(5) .(%4.9) (%58.5)

(%70.7) (%2.4) (%39.0) .(%9.8)
()

		(%61.0)		
		(%12.2)		
			.(7)	.(%14.6)
	(%75.6) (%95.1)		(%58.6)	
			.(%19.5)	
	.(9)			
		(%51.3)		
	(%51.2)			.(%24.4)
	(%19.5)			
	.(%26.8) (%39.0)			
				.(7)
	(%24.4)			
	.(9)			
			(3.8293) (3.8537) (4.0244)	
		(3.6098)		:
	(4.0244) (4.3415)		.(7)	.(3.4390)
			" :H ₀₄ :	
	.(3.1707) (3.4634)			
(9)			"	
		t		
		(2.8780)		(+6.573)
	" :H ₀₅ :			
t				
				.(8)
	(-1.098)			
	.(-2.0211)	t		

EMA

EMA

.(10)

.

.(3)

EMA

(%36.6)

(%29.3)

-2

(%34.1)

.(4)

(%46.4)

.(11)

.(%29.3)

(2.9512):

.(11)

.(2.9024) (2.6829)

" (Cost4)

"

(5)

-3

.(7) (6)

.(7)

:

-4

-1

(2)

EMA

-2

(8) (9).

(9).

-3

-5

(10).

(11).

-4

-1

/

: (1)

0.694	(10 -1)	: EMA	-1
0.623	.(17-11)	:Cost1	-2
0.648	.(22 -18)	:Cost2	-3
0.612	.(27 -23)	:Cost3	-4
0.707	.(30 -28)	:Cost4	-5

t : (2)

	t	t	
	40		
.000	2.0211	6.105	.63441 3.6049

: (3)

		%				
		sda	da	a	sa	
1.24988	3.7073	2.4	22.0	24.4	36.6	:Q2
1.01513	3.6585	-	17.1	39.0	22.0	EMA :Q5
1.19399	3.7805	-	19.5	14.6	41.5	:Q7
1.35296	3.6585	9.8	9.8	17.1	39.0	:Q6
1.27691	3.6585	-	29.3	17.1	39.0	:Q8
1.38017	3.4634	12.2	14.6	26.8	29.3	:Q9
1.14285	3.5122	7.3	9.8	36.6	19.5	:Q3
1.09822	3.4878	-	26.8	36.6	19.5	:Q4
1.22723	3.5122	-	31.7	24.4	29.3	:Q10
1.30150	3.6098	-	31.7	14.6	39.0	:Q1
		0.694				

t : (4)

	t	t		
	40			
.000	2.0211	6.812	.47814	3.5087

: (5)

		%				
		sda	da	a	sa	
84319.	3.8049	-	7.3	48.8	22.0	:Q11
1.00487	3.8780	2.4	4.9	34.1	31.7	:Q17
91931.	3.8293	-	7.3	36.6	26.8	:Q14
95445.	3.8049	-	7.3	29.3	29.3	:Q12
70278.	3.6098	-	4.9	51.2	7.3	:Q13
76668.	3.3659	-	9.8	31.7	7.3	:Q16
97155.	2.3902	22.0	29.3	12.2	-	:Q15
0.623						

t : (6)

	t	t		
	40			
.000	2.0211	6.519	.70538	3.7512

:(7)

		%				
		sda	da	a	sa	
85111.	4.0244	-	2.4	36.6	34.1	:Q18
1.06210	3.8537	-	12.2	24.4	36.6	:Q21
1.09322	3.8293	-	14.6	24.4	36.6	:Q22
1.04590	3.6098	-	19.5	36.6	22.0	:Q19
1.36104	3.4390	12.2	12.2	22.0	29.3	:Q20
0.648						

t : (8)

		t			
		t	t		
		40			
.000		2.0211	6.573	.56071	3.5756

:(9)

		%				
		sda	da	a	sa	
57488.	4.3415	-	-	39.0	56.1	:Q23
72415.	4.0244	-	-	48.8	26.8	:Q24
97718.	3.4634	-	19.5	36.6	14.6	:Q27
1.13803	3.1707	9.8	14.6	26.8	12.2	:Q26
95381.	2.8780	12.2	14.6	26.8	-	:Q25
0.706						

t : (10)

		t			
		t	t		
		40			
.279		2.0211 -	1.098 -	.90092	2.8455

:(11)

		%				
		sda	da	a	sa	
1.22375	2.9512	19.5	9.8	29.3	7.3	:Q28
1.21324	2.6829	22.0	24.4	31.7	2.4	:Q29
.94353	2.9024	9.8	19.5	29.3	-	:Q30
0.707						

1999

2003 52

2000

2005

2007

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The Extent of Adopting Environmental Management Accounting Technique and of Accounting for Environmental Costs by Industrial Jordanian Companies

Sliman Saned Al Soboa

ABSTRACT

The objective of this study is to recognize whether the industrial Jordanian companies adopt the Environmental Management Accounting (EMA) technique and whether they account for the environmental costs for their internal use. In order to achieve this objective, a questionnaire that consists of thirty questions was developed and distributed to the entire target population of industrial Jordanian companies that were listed on Amman Stock Exchange for the year 2007. Forty-four questionnaires were returned, of which forty-one were found suitable for statistical analysis, forming a ratio of (60.3%) of population (68). For testing the hypotheses, OneSample t-test was used.

The results of this study show that industrial Jordanian companies adopt EMA for the internal use, the companies also account for three of environmental costs categories (waste and emission treatment, prevention and environmental management, and material purchase value), while the fourth category of environmental costs (processing costs) was not accounted for. It is recommended that the companies should pay more attention with regard to tracing and identifying some of the environmental costs at the organization level.

KEYWORDS: Environmental Management Accounting, Environmental Cost.