

**jOiNEd For sUsTainability - bUilding climate REsilient
communities in WB and EU**

WP2 - Task 2.4: Survey and questionnaires

Online Project meeting
University of Tuzla

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Place: online



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Questionnaire for business sector

- Completed 207 companies in Bosnia and Herzegovina:
 - 11,6% Wholesale or Retail Trade; Repair of vehicles and motorcycles
 - 11,1% Processing
 - 10% Other service activities
 - 9% Professional, scientific and technical activities
- Category of the business based on the annual income
 - 55% Micro and small legal entity (total annual income is up to 700,000.00 KM and 8.000.000,00 KM)
 - 16,4% Medium-sized legal entity (total annual income is up to 40,000,000.00 KM)
 - 16,9% Large legal entity (total annual income is 40,000,000.00 KM)
- 60,8% Limited Liability Company





Sample

Sectors	No. of active companies*	No. of companies partaking in study	% of companies partaking in study
Processing	6844	23	0,34%
Construction	3426	15	0,44%
Wholesale or Retail Trade; Repair of vehicles and motorcycles	15042	24	0,16%
Transport and Storage	2659	11	0,41%
Professional, scientific and technical activities	4656	19	0,41%
Agriculture, Forestry, Fishing	1362	10	0,73%
Information and communication	1854	16	0,86%
Electricity, gas supply, steam and air conditioning	587	14	2,39%
Accommodation and food service	2063	5	0,24%
Health and social work activities	1529	6	0,39%
Financial and insurance activities	299	9	3,01%
Extractive Industry	253	4	1,58%
Activities of families as employers; Activities of production of goods and services of households for their own use	3	3	100,00%
Administrative and support services	1995	2	0,10%
Other services	13484	46	0,34%
Total	56056	207	0,37%

* Source: Federal Bureau of Statistics





Descriptive analysis

Main characteristics of study sample (N=207)

Variables	Descriptive statistics
Average years in operation	22,74
Average number of employees per company	210,60
Female-led companies	22 (10,6%)
Legal status/form of company	Limited liability 126 (60%)
	Unincorporated business 6 (3,5%)
	Corporation 20 (7%)
	Other 55 (26,5%)
Size of company	large 35 (16,9%)
	medium 34 (16,4%)
	small & micro 114 (55%)
	not applicable 24 (11,6%)



Descriptive analysis



Companies that:	Mean (%)		Gap
	All companies	Large corporations	
Have adopted a national/international environmental certification program	27,0%	45,7%	18,7%
Have a detailed plan to reduce the environmental impacts	24,6%	51,4%	26,8%
Designate an employee/team/structure for environmental management	19,8%	48,5%	28,7%
Collaborate with other businesses for environmental management	14,0%	28,5%	14,5%
Estimate the quantity of solid waste discharged	25,6%	42,8%	17,2%
Estimate the quantity of hazardous waste discharged	26,0%	42,8%	16,8%
Send delegates to environmental conferences/activities	35,7%	62,8%	27,1%
Hold staff meetings to address environmental issues	23,7%	48,6%	24,9%
Have an earmarked budget for adoption of green practices	17,4%	31,4%	14,0%
Estimate the level of noise emissions	28,9%	48,6%	19,7%
Publicize information about their environmental impact	25,6%	54,3%	28,7%
Have a green transport plan/procedure (for staff, customers, freight)	24,0%	40,0%	16,0%
Conduct environmental management training for staff	20,3%	54,3%	34,0%
Engage in community-based environmental initiatives	44,4%	65,7%	21,3%
Inform customers about their environmental effects	33,8%	42,8%	9,0%
Implement measures to protect the environment	30,0%	48,6%	18,6%
Estimate the level of energy consumption/savings/losses	49,3%	62,8%	13,5%
Implement measures to reduce pollution	64,7%	60,0%	-4,7%





Descriptive analysis

Companies that:	Mean (%)		Gap
	All companies	Large & medium corporations	
Have adopted a national/international environmental certification program	27,0%	49,0%	22,0%
Have a detailed plan to reduce the environmental impacts	24,6%	45,0%	20,4%
Designate an employee/team/structure for environmental management	19,8%	39,1%	19,3%
Collaborate with other businesses for environmental management	14,0%	45,0%	31,0%
Estimate the quantity of solid waste discharged	25,6%	42,0%	16,4%
Estimate the quantity of hazardous waste discharged	26,0%	43,4%	17,4%
Send delegates to environmental conferences/activities	35,7%	55,0%	19,3%
Hold staff meetings to address environmental issues	23,7%	40,6%	16,9%
Have an earmarked budget for adoption of green practices	17,4%	27,5%	10,1%
Estimate the level of noise emissions	28,9%	46,4%	17,5%
Publicize information about their environmental impact	25,6%	43,4%	17,8%
Have a green transport plan/procedure (for staff, customers, freight)	24,0%	36,2%	12,2%
Conduct environmental management training for staff	20,3%	40,6%	20,3%
Engage in community-based environmental initiatives	44,4%	59,4%	15,0%
Inform customers about their environmental effects	33,8%	36,2%	2,4%
Implement measures to protect the environment	30,0%	47,8%	17,8%
Estimate the level of energy consumption/savings/losses	49,3%	68,0%	18,7%
Implement measures to reduce pollution	64,7%	50,7%	-14,0%





Hypotesis testing

- Chi-Square?
- H0: There is no relationship between size of company and green practices adoption

f_0 (observed)	f_t (expected)	$f_0 - f_t$	$(f_0 - f_t)^2$	$(f_0 - f_t)^2 / f_t$	χ^2
22	34,88	-12,88	165,8944	4,756147	18,19
92	79,11	12,89	166,1521	2,100267	
34	21,11	12,89	166,1521	7,870777	
35	47,88	-12,88	165,8944	3,464795	

table: 5% level of significance; 1 degree of freedom **critical value: 3,843**

**18,19 > 3,843 - null hypothesis rejected,
therefore company size and green practices adoption are dependent**





Thank you for your attention

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