



**Assignment** Development of Business models and Business plans for two (2) training providers and support in the implementation phase

## REPORT

### On Skills gap analysis and Training needs assessment (TNA)

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*This document is second deliverables from ToR for the assignment, aiming at identification of skills gap in Sustainable building sector and training needs assessment for obtaining qualified workers due to construction company's requirements.*

*The purpose of the report is to make recommendations as a base for development of Business model of the two training providers.*

Skopje 31.07.2016

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## INTRODUCTION

IME Project selected two companies to support in developing Training centers. In parallel with the assessment of existing potential of Craftmaster Skopje and Termalconfort Gostivar for development of Training Centers the skills gap analysis has been carried out and TNA with recommendations has been prepared. .

The analysis encompassed of presentation of building sector trends in 2015/16 , labour market trends and skills demand by construction companies.

The data of the report are collected by desk research, focus group meeting with companies organized on 21.07.2016 and direct interviews with companies about skills gaps and the most required occupations.

### 1/ SUSTAINABLE BUILDING SECTOR TRENDS IN 2015

In 2015 Construction market has growth by 18, 37% compared to 2014. Share of Private investments declined from 53.4% to 43.3% while share of public investment increase from 46.6% to 56,7% **Buildings sector market share decrease from 50.2% in 2014 to 41,0% in 2015** ( from 219.511.138 euro to 195.285.870 euro). The main sector product new buildings has decreased by 11,04% while renovations have increased by 22,81%. (see table 1).

The **prices per m<sup>2</sup> slightly went down** by 0,9 % with bigger decreased in Skopje , 1,79% vis-à-vis 0,78 % in other municipalities(table2).

The **numbers of new flats (finished and unfinished) is increased** in 2015 by 1,6 % but built surface is declined by 5,3% ( see table 3).

From the other side the **consumption of construction materials is increased by 27,85 %** with the biggest increased of spent materials for insulation, 90.44% (table 4). Due to issued permits for building of apartments its number in first 5 months in 2016 is increased compared to 2015. (table 5)

The number of **active enterprises in construction sector is increased by 80**, from 4.349 in 2014 to 4.429 in 2015.( table 6).<sup>1</sup>

#### 1.1 Employment in Sustainable Building Sector in 2015

**Employment growth faster in construction sector 3,58%** than total employment in national economy., 2,29%. (table 7).

In 2015 the **number of employees in Sustainable building sector is increased by 1,41 %** , meaning smaller growth than in total construction sector. From total employees the number of male is decreased while female employees is increased. (table 8).

In the first quarter in 2016 the number of filled jobs is 28.975 and number of free jobs (vacancies) is 793, showing that 2,66 positions in building sector are not filled with workers. **The trends are that every years the numbers of filled vacancies and free jobs in SBS are increased.**( table 9).

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<sup>1</sup> All data in tables 1-9 are collected from MAKSTAT data base, [www.stat.gov.mk](http://www.stat.gov.mk)

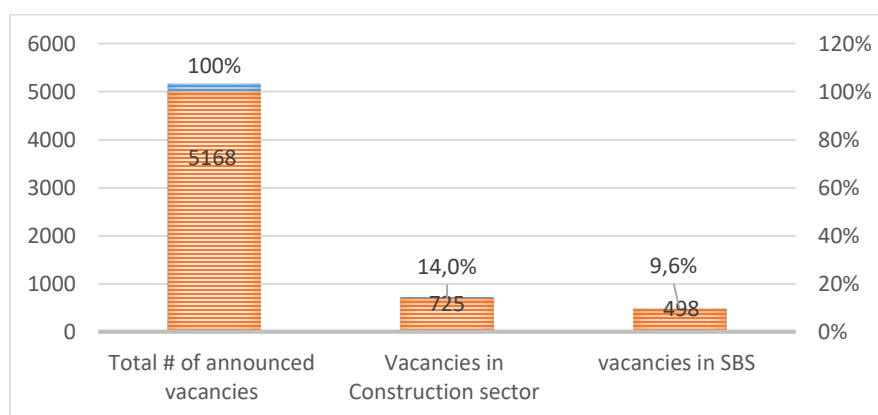
*Fundings: The SBS growth in 2015 slowed down followed with increased number of new enterprises and employees. The reasons for this trends can be justified by decreased in the prices per 1 m<sup>2</sup> and by low productivity of the companies, including low level of skills and competences of workers.*

## 2/ LABOUR MARKET IN SUSTAINABLE BUILDING SECTOR IN 2015

The collected and analyzed statistical data was compared with data from national Employment Agency (ESA) as the trends can be validated. As the ESA is place where labor market demand and offer are met the online announcement of the vacancies in SBS was source of data<sup>2</sup>.

From total announced vacancies (5168), 14 % were for construction sector (725), out of them 498 vacancies were for SBS or 9,6% for total number of vacancies.<sup>3</sup>

*Figure 1 Announced vacancies and share of SBS vacancies*



The **eight most demanded occupations** are Mason, bricklayer, Construction worker, Joiner – Cutter, Installer of construction elements, façade , HVAC Installer, Electro-Installer and House painter. They **represented 63% from number of demanded occupations by SBS.**

*Overview 1 Eight the most demanded occupations from SBS in July 2016*

Occupation Name - Име на занимањето	# of Announced jobs	# of Part Time jobs 1,3 or 6 m	# of Full time jobs	Starting Wage	Weekly hours	Qualification Level	Experience &	Daily working time
Сидар- Mason, bricklayer	48	14	34	10080-13000	40	# 2 \$ # 4	1 Call- 1 year	8-16,00
Constructon worker	73	67	6	10080-15000	40		No required	8-16,00
Joiner - Cutter	71	20	51	1080-13000	40		No required	8-16,00
Installer of construction elements	16	5	11	11400	20-40	No level	No required	8-16,00
façade - фасадер	26	22	4	11000-12300	40	no level	No required	8-16,00
HVAC Installer - Instalater za greenje l lade	8	4	4	11000-20001	40	# 4	No required	8-16,00
ElectroInstaller- Електроинсталатер	31	21	10	13000-15000	40	# 4	No required	8-16,00
House painter-Moler	41	30	11	10000-12000	40	# 3	No required	8-16,00
<b>Total 1-8</b>	<b>314</b>	<b>183</b>	<b>131</b>					
Share	100,0%	58,3%	41,7%					
Total number of announced vacancies in SBS	498							
<b>Share in Total opened jobs in SBS</b>	<b>63,1%</b>							

<sup>2</sup> ESA link <https://e-rabota.avrm.gov.mk/OglasSearch.aspx> accessed on 26.07.2016

<sup>3</sup> <https://e-rabota.avrm.gov.mk/PublicReports/PublicReportsOglasi.aspx> accessed on 26.07.2016

Out of 314 vacancies for those 8 occupations, 183 or 58.3% were part time jobs and 173 or 55,4% from companies located in Skopje. In addition the overview 1 shows the number of required workers, starting wage, as well as a qualification level and experience as application criteria required by employers.

The other vacancies concerned to civil and electro technicians and architectures and civil engineers. The more details about those vacancies and demand by companies from Skopje are given in table 10.

*Findings: It can be noticed that the starting wages are around minimal wage in Macedonia. As the experience or other criteria are not required it can be said that qualified workers are bottleneck or they have no interest to be employed (the most of qualified workers want to be freelancers, sub-contractor without being employees).*

## 2.1/ Supply of skills development

Supply side is mainly stimulated by national Employment Agency through Governmental Operational Plan for Employment. Two programs directly contribute to skills supply: Money subvention for new jobs opening and training for demanded skills.

*Overview 2 Measures form Operational Plan for employment that support skills supply*

			2015				2015			
			Unemployed			Youth	Unemployed			Youth
Program	Measure	Name of the Program/measure	Number	Total MKD	MKD per user	Number	Number	Total MKD	MKD per user	Number
<b>3</b>		<b>Money subvention for new jobs</b>	<b>5.653</b>	<b>236.400.000</b>	<b>41.819</b>	<b>3.101</b>	<b>5.716</b>	<b>747.662.600</b>	<b>130.802</b>	<b>3.160</b>
	3.1.	Creation of new jobs	200	18.400.000	92.000	60	250	23.000.000	92.000	100
	3.2.	Conditional money contribution for vulnerable groups	136	18.000.000	132.353	41	166	16.822.600	101.341	60
	3.3.	Macedonia employed	5.000	0	0	3.000	5.000	507.540.000	101.508	3.000
	3.4.	Jobs for people with disabilities	317	200.000.000	630.915		300	200.300.000	667.667	
<b>4</b>		<b>Training</b>	<b>5.173</b>	<b>161.296.260</b>	<b>31.180</b>	<b>2.269</b>	<b>3.934</b>	<b>140.026.700</b>	<b>35.594</b>	<b>1.949</b>
	4.1.	Training for known employer	1.000	22.617.000	22.617	300	300	6.785.100	22.617	90
	4.2.	On the job training with money subvention	476	63.117.600	132.600	142	333	44.181.000	132.676	100
	4.3.	Training for demanded occupations IPA grant	220	12.056.000	54.800	66	643	35.236.400	54.800	193
	4.4.	Training for demanded occupations by private verified training providers	181	9.918.800	54.800	54	100	6.200.000	62.000	30
	4.5.	IT skills	270	22.425.660	83.058	81	332	21.423.000	64.527	150
	4.6.	Internship	1.000	18.600.000	18.600	1.000	1.000	18.600.000	18.600	1.000
	4.7.	Survey for skills needs on labour market	26	161.200	6.200	26	26	161.200	6.200	26
	4.8.	Basic skills ( IT and foreign language)	2.000	12.400.000	6.200	600	1.200	7.440.000	6.200	360
		<b>Total 3+4</b>	<b>10.826</b>	<b>397.696.260</b>		<b>5.370</b>	<b>9.650</b>	<b>887.689.300</b>		<b>5.109</b>
		<b>New training measures in 2016</b>								
		Internship 2 with mentor					500			500
		Internship 3 -students and pupils					1.500	15.590.250	10.394	1.500
		Training of trainers for some sectors					30	2.806.000	93.533	
		<b>Total</b>	<b>10.826</b>	<b>397.696.260</b>		<b>5.370</b>	<b>11.680</b>	<b>906.085.550</b>		<b>7.109</b>

Source: Operational Plans for employment 2015 and 2016

Overview 2 shows that number of unemployed support with money subvention is slightly increase but the number of targeted unemployed for training is reduced by 24 %, concerning to young unemployed reusing is 14%.

Referring to SBS two measures are more important: training for known employer and training for demanded occupations on the labour market by verified private training providers.

In 2015 the public call of ESA encompassed of 2 occupations from SBS: façade workers and installers of solar panels, out of 30 announced occupations.

According to Center for Adult Education data base there are 17 verified training providers for SBS skills with 5 verified programs (one program is verified by more training providers)<sup>4</sup>. In 2015 were organized only 2 trainings for façade workers and gypsum installer for dry building (30 participants). Two limitations are set up for usage of measure training for demanded occupations: training provider must have verified program and minimum number of 15 candidates as the training can be organized by Local Employment Center. The main problem for implementation of those measures is lack of application for demanded occupations by SBS<sup>5</sup>.

In 2016 Public Call concerned to 32 occupations, out of them 6 occupations refer to SBS: façade workers ( Skopje, Stip, Bitola, Strumica); carpenter( Skopje, Kumanovo); Gypsum installer (Stip, Strumica); mason ( Bitola Stip, Strumica); joiner ( Kumanovo, Strumica, Stip, Bitola); Installer of solar panel ( Skopje). Total number of targeted unemployed is 643 meaning that remarkable number of SBS workers can be trained if there is candidates in mentioned Local employment centers.

The ways how to use this opportunities by construction companies need further more details analysis.

### 3. SKILLS GAP ANALYSIS

Skills development is linked with definition of Occupational standards that is legal responsibility of national VET center. Out of 7 defined occupational standards for Construction sector only 3 standards refer to SBS occupations: façade, gypsum installer and installer of dry building.<sup>6</sup>

The first skills gap is absence of occupational standards for more demanded: mason, roofers, carpenter, joiner, HVAC installer; builder of metal framework, floorer etc.

Therefore the skills gap is assessed by direct contact with construction companies. One workshop<sup>7</sup> was organized with SBS companies and telephone surveys was carried out. The available researches of this topic was used as well.

The skills gap were identified in four groups of occupations:

a) *managing of construction companies* in terms of building period, quality assurance , recruitment and development and managing performances of qualified workers;

b) *Building planning* that is connected with architectures, mechanical and electro engineers and their Energy Efficiency knowledge); skills gap concerned to:

- Details in planning insulation and minimum thermic characteristics of the building , requirements from National Rulebook;
- Planning of roof. thickness of insulation
- Carpenter, selection of types of window and installation technics

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<sup>4</sup> [www.cov.gov.mk](http://www.cov.gov.mk)

<sup>5</sup> Telephone conversation with ESA representatives

<sup>6</sup> [http://www.csoo.edu.mk/index.php?option=com\\_content&task=view&id=141&Itemid=1](http://www.csoo.edu.mk/index.php?option=com_content&task=view&id=141&Itemid=1)

<sup>7</sup> The report with main findings and conclusions is annex to this document.

- Mason and façade, types of insulation, usage of proper insulation materials and building technics
- Usage of compatible materials for main operations, from one supplier as the maximum efficiency can be provided

c) *Building operations:*

- Façade workers: knowledge for more types of facades ( stiropor, terfon, structured, vertical); thickness of insulation; technical characteristics of materials; proper tools ; high quality of performances; level of condensation.
- Roofers: inside and outside insulation; right installation of insulation materials; technical characteristics of materials; proper tools
- Carpenters; installation of window; knowledge about and selection of glass, straightening and leveling of windows; technical characteristics of materials; proper tools
- Floorer: characteristics of thermo insulation materials, selection of materials, proper tools and thickness of insulation.
- HVAC installer: selection of right equipment according to building needs, calculation of CO<sub>2</sub> emission; technical characteristics of materials; proper tools.
- Electro-installer ; usage of EE lightening

d) *Buildings' maintenance* regarding to incidental and periodically repairing and maintaining of building

The needs of workshop's participants for workers for next 12 months period is estimated to 200 ( 50 façade workers, 25 plasterers; 25 carpenters and roofers; 5 HVAC installers; 50 electricians; 45 masons- bricklayers). Having in mind the number of permanent announced vacancies in SBS the skills gap for next 12 months can be estimated to 450 onsite workers in following occupations; Facades; mason; roofers, carpenters, electricians and HVAC installers.

### 3.1/ Training needs analysis

The main constraints for training of existing or new workers are: the ways of acquiring practical skills (existing training providers are focused on theoretical knowledge); and keeping the qualified workers in the companies after trainings (the big number of workers search for job opportunities abroad).

The most companies prefer on the job training that provide practical skills. Some of companies used three days period for testing the skills and after that they decide about employment.

The companies had no practices to train workers with external training providers except some companies that used every opportunity for free of charge training. The companies stated that they used on the job training for new employees, elaborating that 50 % of the employed on-site workers are masters and 50 % assistants or trainees.

The estimated costs for in-house training of workers are 3.000 euro that included time for training, materials used; payment of wage which is not earned by workers. The period of training is 6 months when the employees can have productivity to earn its wage with required performances and production quotas;

Beside the fact that they spent 3.000 euro per new employees' skills, the willingness to pay for training is not clearly defined by companies. The stated amount that are willing to pay for training was from 500 euro to 1.500 euro per worker. It was not identified that some companies have already paid for

training as they usually used the short trainings from construction materials' providers or trainings delivered by some of the EU or donors projects.

In addition there is no available funds for training of employed people as the Governmental training and qualification measures refer only to unemployed people.

The survey shows that the wages of analyzed occupations depend on working hours and norms per m<sup>2</sup>, meaning that higher wage can be earned with more working hours or higher quantity of work done. There is big difference in hourly net wage between skilled and no skilled workers, 150 mkd/h compared to 100 mkd/h. It is estimated that for 168 hours per month difference in wage is 8.400mkd.

This can be used as awareness raising point for attraction of interest for training. It can be used as cost benefits analysis for training from external training providers.

## RECOMMENDATION FOR AWARENESS RAISING

- 1) The shortage of the workforce for SBS is continually present in last three years, especially for on-site workers. As the existing measures have no significant impact the construction companies have to be more engaged in promotion of those occupation and provision of practical part of the trainings.
- 2) The awareness raising campaign have to focused on synergy of efforts of companies and ESA as the opportunities given by Operational plan for employment can be used to meet demand in SBS.
- 3) Proposal for awareness raising :
  - a. The opportunity for employment have to be widely promote among unemployed people with low level of education and among low-income family as employment opportunity, particular for young people.;
  - b. The construction companies to be involve in selection of candidates for training and evaluation of quality of training programs of external training providers
  - c. The opportunity to combine different measures from operational plan for employment have to disseminate among construction companies;
  - d. The cost benefit analysis form using external training providers for demanded occupations and EE skills have to prepared and disseminate among SBS employers.



Table 1 Building sector market trends in 2015

in 000 MKD	2010	2011	2012	2013	2014	Share	Ind 2014/11	2015	Share	Ind 15/14	Eur 2015
<b>Вкупно</b>	25.025.816	27.343.129	31.494.706	37.750.104	34.813.936	100	139	41.209.648	100	118,37	670.075.577
Вкупно од тоа индивидуална сопственост	16.458.903	18.011.149	19.565.114	19.922.870	18.577.786	53,4%	113	17.854.746	43,3%	96,11	
Вкупно од тоа јавна (општествена) сопственост	8.566.913	9.331.980	11.929.592	17.827.234	16.236.150	46,6%	190	23.354.902	56,7%	143,85	
<b>Станбени згради Вкупно</b>	12.099.009	12.799.387	13.452.814	15.974.180	13.499.935	38,8%	112	12.010.081	29,1%	88,96	195.285.870
Станбени згради од тоа индивидуална сопственост	11.810.939	12.675.268	12.991.398	15.261.807	12.826.031	95,0%	109	11.836.282	98,6%	92,28	192.459.870
Станбени згради од тоа јавна (општествена) сопственост	288.070	124.119	461.416	712.373	673.904	5,0%	234	173.799	1,4%	25,79	
<b>Реконструкција, санација, адаптација, големи поправки и редовно одржување на објектите Вкупно</b>	2.485.902	2.598.898	3.512.933	3.787.328	3.963.937	11%	159	4.868.188	12%	122,81	79.157.528
Реконструкција, санација, адаптација, големи поправки и редовно одржување на објектите од тоа индивидуална сопственост	673.799	568.748	805.317	512.130	970.132	24,5%	144	1.106.589	22,7%	114,07	17.993.317
Реконструкција, санација, адаптација, големи поправки и редовно одржување на објектите од тоа јавна (општествена) сопственост	1.812.103	2.030.150	2.707.616	3.275.198	2.993.805	75,5%	165	3.761.599	77,3%	125,65	61.164.211

Table 2 Prices per 1 m2 in 2015

MKD	2010	2011	2012	2013	2014	2015	Ind 15/14
<b>Вкупна цена по 1м2</b>	52.125	50.131	49.941	46.825	46.505	46.085	99,10
Вкупна цена по 1м2 од тоа трошоци за набавка, подготовка и комунално опремување на земјиштето	14.426	11.518	13.912	11.483	11.947	12.268	102,69
Вкупна цена по 1м2 од тоа трошоци за градење	<b>33.436</b>	<b>34.852</b>	<b>31.795</b>	<b>32.438</b>	<b>30.613</b>	<b>30.071</b>	98,23
Вкупна цена по 1м2 од тоа други трошоци	4.263	3.761	4.234	2.904	3.945	3.746	94,96
<b>Вкупна цена по 1м2, Скопје</b>	64.127	58.958	58.687	54.857	53.878	52.916	98,21
Вкупна цена по 1м2 од тоа трошоци за набавка, подготовка и комунално опремување Скопје	21.352	12.944	19.326	12.739	14.222	14.428	101,45
Вкупна цена по 1м2 од тоа трошоци за градење, Скопје	36.677	41.296	34.826	39.042	35.288	34.001	96,35
Вкупна цена по 1м2 од тоа други трошоци, Скопје	6.098	4.718	4.535	3.076	4.368	4.487	102,72
<b>Вкупна цена по 1м2, останато</b>	44.163	41.304	43.328	39.264	33.505	33.243	99,22
Вкупна цена по 1м2 од тоа трошоци за набавка, подготовка и комунално опремување - останато	9.832	10.092	9.818	10.300	7.937	8.206	103,39
Вкупна цена по 1м2 од тоа трошоци за градење, останато	31.286	28.408	29.504	26.223	22.370	22.682	101,39
Вкупна цена по 1м2 од тоа други трошоци, останато	3.045	2.804	4.006	2.741	3.198	2.355	73,64

Table 3 Build apartments ( unfinished and finished) in 2015

<b>Unfinished flats</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>ind 15/14</b>
<b>Вкупно Број</b>	5.741	5.978	4.999	4.876	4.921	5.141	104,47
Вкупно Површина (во м2)	472.289	493.459	374.809	366.159	324.121	329.246	101,58
<b>Во индивидуална сопственост, Број</b>	5.382	5.721	4.673	4.464	4.796	4.992	104,09
Во индивидуална сопственост, Површина (во м2)	454.457	479.199	341.809	328.969	319.123	320.634	100,47
<b>Во јавна (општествена) сопственост, Број</b>	359	257	326	412	125	149	119,20
Во јавна (општествена) сопственост, Површина (во м2)	17.832	14.260	33.000	37.190	4.998	8.612	172,31
<b>Finished flats</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Ind 15/14</b>
<b>Вкупно</b>	5.152	5.254	6.433	6.528	5.356	5.297	98,9
<b>Површина (во м2)</b>	442.642	459.061	586.009	557.103	478.143	430.858	90,1
Гарсонииери и еднособни	529	593	441	573	395	671	169,9
2 собни	1.414	1.252	1.626	1.820	1.487	1.750	117,7
3 собни	1.621	1.734	2.094	2.324	1.764	1.498	84,9
4 собни	801	819	1.100	980	910	739	81,2
5 собни	385	441	617	409	478	385	80,5
6 собни	140	162	263	168	204	181	88,7
7 собни	102	102	128	95	63	53	84,1
8 и повеќе	160	151	164	159	55	20	36,4
<b>total Finished and Unfinished flats</b>	<b>10.893</b>	<b>11.232</b>	<b>11.432</b>	<b>11.404</b>	<b>10.277</b>	<b>10.438</b>	<b>101,6</b>
<b>Toatl surface of Finished na dUnfinished Flats</b>	<b>914.931</b>	<b>952.520</b>	<b>960.818</b>	<b>923.262</b>	<b>802.264</b>	<b>760.104</b>	<b>94,7</b>

Table 4 Issued permits for apartments 2015-2016

**Број на станови по број и површина за кои се издадени  
одобренија за градење**

Република Македонија

Станови Површина (м2) Станови Површина (м2)

	2015		2016	
January	383	35.209	319	26.165
February	353	28.626	848	66.209
March	487	34.668	527	42.545
April	412	30.939	461	36.417
May	332	28.748	750	63.183
June	209	20.688		
July	956	72.255		
August	339	30.233		
September	376	35.189		
October	869	69.474		
November	539	43.785		
December	919	65.430		
<b>Total</b>	<b>6.174</b>	<b>495.244</b>	<b>2.905</b>	<b>234.519</b>
Share of 2016 in 15			47,1%	47,4%

Table 5 Consumption of Construction materials in 2015

	2010	2011	2012	2013	2014	2015	ind 15/14
<b>Вкупно</b>	6.076.234	7.747.420	9.201.833	10.023.494	9.099.609	11.633.786	127,85
Елементи за зидање	68.334	101.903	169.785	201.208	159.766	154.122	96,47
<b>Елементи за тавани и сводови</b>	<b>5.680</b>	<b>11.196</b>	<b>9.384</b>	<b>8.023</b>	<b>9.313</b>	<b>9.433</b>	<b>101,29</b>
Префабрикувани елементи и готови конструкции	53.021	152.766	243.756	169.441	141.997	229.296	161,48
Материјали за врзување	1.900.612	2.032.206	2.846.296	3.365.109	3.133.427	3.422.460	109,22
Агрегати и профилиран материјал од камен	688.188	1.530.191	595.334	664.667	667.457	1.009.210	151,20
Материјали за армирање и прицврстување	427.956	680.699	940.911	1.408.200	813.388	1.195.320	146,96
Дрвена граѓа	87.160	97.309	102.747	107.180	128.106	156.636	122,27
<b>Изолациски материјал и премази</b>	<b>826.016</b>	<b>987.100</b>	<b>798.206</b>	<b>843.180</b>	<b>699.439</b>	<b>1.332.028</b>	<b>190,44</b>
Материјал за покриви	7.815	7.571	8.805	10.669	68.113	8.041	11,81
Материјал за подови и обложување на зидови	138.327	183.960	169.121	184.581	227.712	214.168	94,05
Материјал за инсталации на вода, канализација, греење, вентилација, санитарии	268.333	428.514	724.725	613.713	1.028.468	1.089.969	105,98
Материјал за инсталации на јака и слаба струја	19.446	16.182	116.524	75.042	202.005	66.884	33,11
<b>Друг материјал и елементи за вградување</b>	<b>605.523</b>	<b>348.596</b>	<b>765.372</b>	<b>551.335</b>	<b>453.842</b>	<b>1.086.893</b>	<b>239,49</b>
<b>Потрошено гориво</b>	<b>979.823</b>	<b>1.169.227</b>	<b>1.710.867</b>	<b>1.821.146</b>	<b>1.366.576</b>	<b>1.659.326</b>	<b>121,42</b>

Table 6 Number of active enterprises in construction sector and share in total number 2011-2015

Број на активни деловни субјекти по сектори на дејност според НКД Рев. 2 и според бројот на вработени, по години												
	2010		2011		2012		2013		2014		2015	
	Вкупно	учество во %	Вкупно	учество во %	Вкупно	учество во %	Вкупно	учество во %	Вкупно	учество во %	Вкупно	учество во %
Градежништво	4368	5,8	4400	6	4541	6,1	4322	6,1	4349	6,2	4429	6,3

Table 7 Share of construction sector employees in total number of employees 2011-2015

	2010	2011	2012	2013	2014	2015	ind 15/14
Вкупно	637.855	645.085	650.554	678.838	690.188	705.991	102,29
Градежништво	41.060	39.961	41.024	46.955	48.143	49.866	103,58

Table 8 Employees in building sector by types of operations 2010-2015

Вработени во Република Македонија според сектори и оддели на дејности по НКД Рев.2, по пол, по години																			
	2010			2011			2012			2013			2014			2015			Ind 2015/14
	Вкупно	Мажи	Жени	Вкупно	Мажи	Жени	Вкупно	Мажи	Жени	Вкупно	Мажи	Жени	Вкупно	Мажи	Жени	Вкупно	Мажи	Жени	Total
ГРАДЕЖНИШТВО	23.340	19.766	3.574	26.106	22.871	3.235	27.575	24.044	3.531	26.266	22.815	3.451	28.640	24.301	4.339	29.264	25.570	3.694	102,18
41 Изградба на згради	7.499	6.755	744	8.181	7.200	981	9.015	7.964	1.051	10.049	8.716	1.333	10.813	9.266	1.547	10.966	9.170	1.796	101,41
42 Нискоградба	6.059	5.180	879	7.110	6.407	703	6.908	6.218	690	5.174	4.721	453	5.902	5.190	712	6.640	5.892	748	112,50
43 Специјализирани градежни дејности	9.782	7.831	1.951	10.815	9.264	1.551	11.652	9.862	1.790	11.043	9.377	1.666	11.925	9.845	2.080	11.658	10.508	1.150	97,76

Table 9 Filled positions and free jobs ( vacancies) in Sustainable Building sector 2014Q4-2015Q4 and Q1 2016

Пополнети и слободни работни места според сектори на дејности, НКД Рев.2, по тримесечја									
	2014T4			2015T4			2016T1		
	Број на пополнети работни места	Број на слободни работни места	Стапка на слободни работни места (%)	Број на пополнети работни места	Број на слободни работни места	Стапка на слободни работни места (%)	Број на пополнети работни места	Број на слободни работни места	Стапка на слободни работни места (%)
Г Градежништво	24.906	530	2,08	26.443	614	2,27	28.975	793	2,66
Разлика во однос на претходната година				1.537	84		2.532	179	

Table 10 Announced vacancies for SBS in July 2016

	Occupation Name -Име на занимањето	# of Announced jobs	# of Part Time jobs 1,3 or 6 m	# of Full time jobs	Starting Wage	Weekly hours	Qualification Level	Experience &	Daily working time
1	Сидар- Mason, bricklayer	48	14	34	10080-13000	40	# 2 \$ # 4	1 Call- 1 year	8-16,00
	Skopje-Скопје	25	5	20	11000	20-40		No required	7-15,00
2	Constructon worker	73	67	6	10080-15000	40		No required	8-16,00
	Skopje-Скопје	28	28	0				No required	
3	Joiner - Cutter	71	20	51	1080-13000	40		No required	8-16,00
	Skopje-Скопје	50		50					
4	Installer of construction elements	16	5	11	11400	20-40	No level	No required	8-16,00
	Skopje-Скопје	1		1		20			
5	façade -фасадер	26	22	4	11000-12300	40	no level	No required	8-16,00
	Skopje-Скопје	26	22	4					
6	HVAC Installer - Instalater za greenje I lad	8	4	4	11000-20001	40	# 4	No required	8-16,00
	Skopje-Скопје	4	4	0					
7	ElectroInstaller-Електроинсталатер	31	21	10	13000-15000	40	# 4	No required	8-16,00
	Skopje-Скопје	19	15	4					
8	House painter-Moler	41	30	11	10000-12000	40	# 3	No required	8-16,00
	Skopje-Скопје	21	20	1					
	<b>Total 1-8</b>	<b>314</b>	<b>183</b>	<b>131</b>					
	Skopje-Скопје	174	94	80					
	Share of Skopje	55,4%	51,4%	61,1%					
9	Civil technician- Gradezen tehnicar	38	23	15	15000	40	#4	1call- 2 year	
	Skopje-Скопје	32	22	10					
10	Electrotechnician- Elektrotehnicar	19	6	13	150000	20-40	#4	No required	8-16,00
	Skopje-Скопје	13	3	10					
11	Архитекти -Architects	13	5	8	19000-32000	40	# 6a	1call - 2 year	8-16,00
	Skopje-Скопје	12	5	7					1call two shifts
12	Civil engeneer-градежен инжењер	42	16	26	11500-25000	10-40 h	# 6a	2-3year	8-16,00
	Skopje-Скопје	28	14	14					
	<b>Total in Sustainable Bussines sector</b>	<b>498</b>							