

Introduction to GOTS Monitor (Water / Energy) Tool



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Environmental Management Criteria



GOTS Version 5.0, Section 2.4.10 (Environmental Management Criteria)- Requirements for textile wet processing facilities:

Certified entities must have available and provide

- 1. Data on **energy and water** consumption per kg of textile output and*
- 2. **Targets** and **procedures** to reduce energy and water consumption per kg of textile output*

Both these requirements are covered by GOTS Monitor Water/ Energy Tool

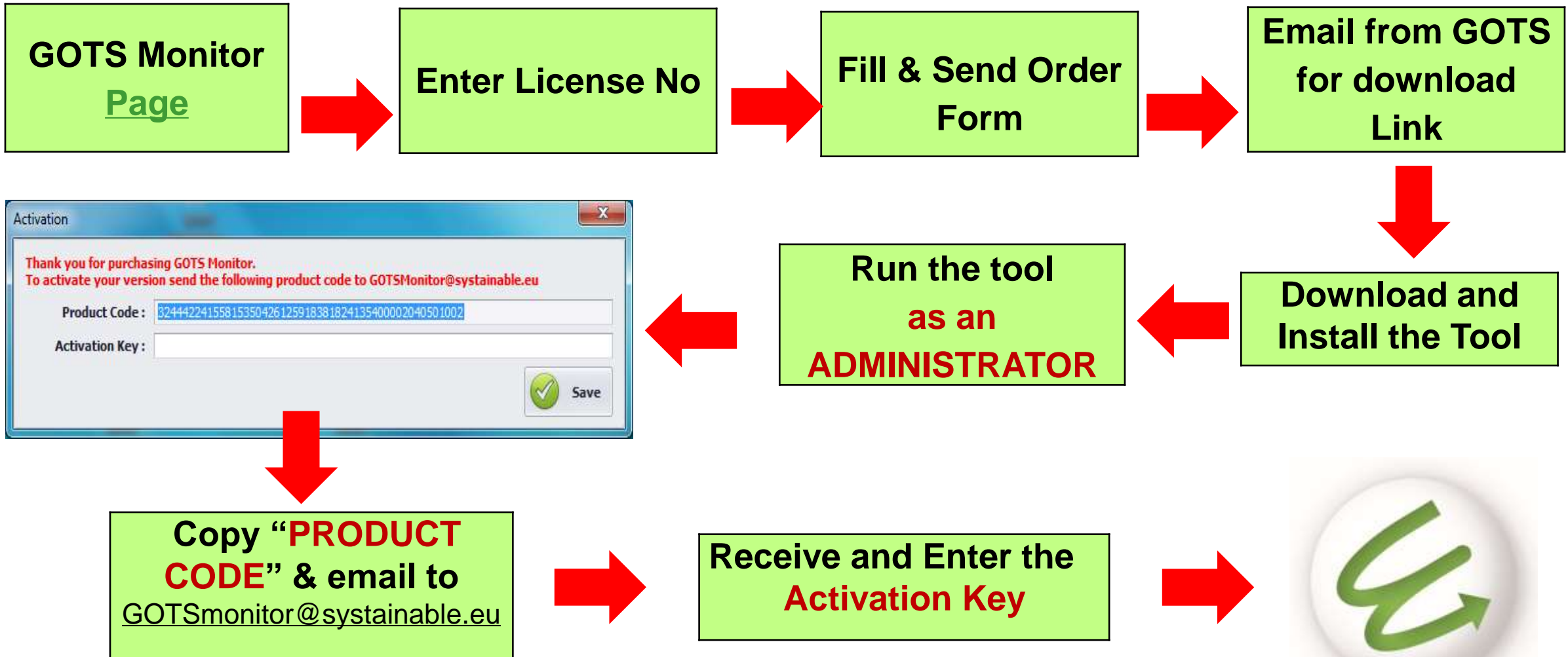
- The tool determines actual performance and specific consumption values and provides realistic, factory-specific benchmark values that can be used both as improvement targets and milestones to monitor their progress.
- The revamped tool is **free** to use for GOTS certified textile companies.

Features of GOTS Monitor W/E Tool (v 2.0)



- Is developed using **state-of-the-art tools and methods**
- It is **user-friendly, stable, scalable, portable and robust**
- Has a much **simpler User Interface than Version 1.0**
- Uses a much **simpler activation and licensing scheme**
- Includes **enhanced processing methods and tools knowledge base**
- Utilizes much **more accurate and extensive benchmarking methodology**
- **As a result, GOTS Monitor W/E V2.0 tool allows for much better and accurate evaluation of the energy and water efficiency of textile manufacturing facilities.**

Installation Procedure



Different Sections in the W/E Tool



- **Production Data:** Data on processes used, utilities such as Water, energy and Chemicals. (Units of water and units of energy consumed to produce one unit of textile output).
- **Dashboard :** Outcome of the data in graphical form. (efficiency)
- **Profiler:** Configuration of the activities, products, machines and utilities.
- **Administration:** Information of software.



Configuration



Activity

Join Date: 9/9/2018 06:22:26

*Activity Type: Discontinuous dyeing / wet-processing

*Code: MY ACTIVITY Description: MY ACTIVITY DESCRIPTION

*Responsible: DV

*Address1: GREECE Address2: ADDRESS2 Address3: ADDRESS3

*Telephone1: +3056463436 Telephone2: PHONE2 Telephone3: PHONE3

*Email1: MYMAIL@MAIL.COM Email2: MYMAIL2@MAIL.COM Email3: MYMAIL3@MAIL.COM

*Currency: Euro Daily Cost: 8000,00

Save Cancel

Activity

GOTS Monitor (Water/Energy) 2.0

ACTIVITY PRODUCTS MACHINES UTILITY

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Machine	Machine Process	Total Production (kg)	Number of Machines
1	Wet Dyeing M1	1000	1
2	Wet	1800	2
3	Wet Dyeing M2	10000	10

Machines

GOTS Monitor (Water/Energy) 2.0

ACTIVITY PRODUCTS MACHINES UTILITY

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Product	Quality	Coloration
1	White	Single Jersey
2	Dark Blue/Red	Wet
3	White	Wet Dyeing

Products

GOTS Monitor (Water/Energy) 2.0

ACTIVITY PRODUCTS MACHINES UTILITY

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Utility	Utility System	Unit	Unit Cost	Volume	Volume Price (€)
1	Gas	kg	0,05 €	100	5 €
2	Oil Electricity	kWh	0,1 €	100	10 €
3	Water	m ³	0,1 €	100	10 €
4	Water 1	m ³	0,1 €	100	10 €

Utilities

Data-Monthly basis



- **Production Data**
- **Chemical Consumption data**
- **Utilities Consumption Data**

Production Data



GOTS Monitor (Water/Energy) 2.0

PRODUCTION DATA

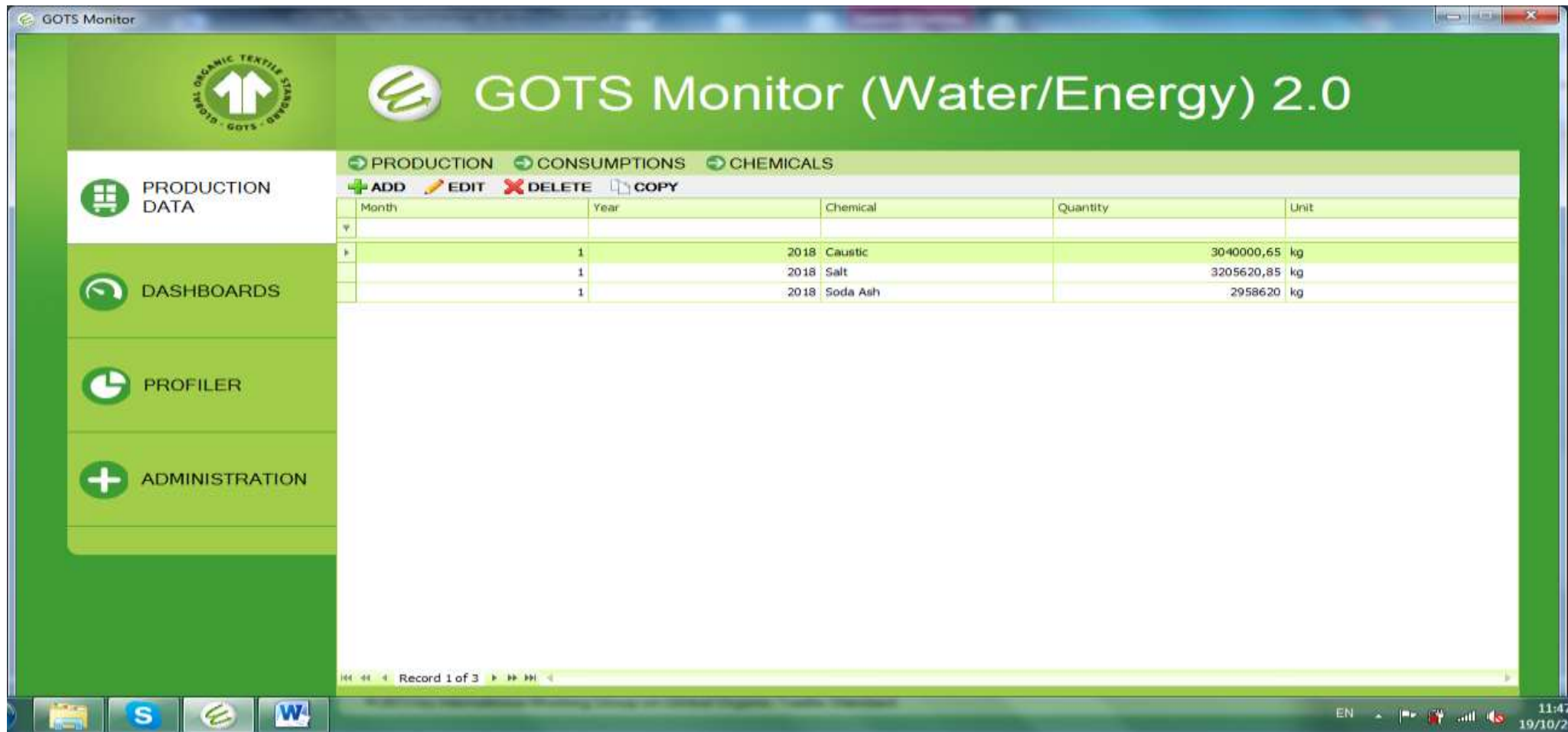
PRODUCTION CONSUMPTIONS CHEMICALS

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Month	Year	Product	Operation Days	Dye Type	Shade Depth	1st Q Production	2nd Q Production	Waste	Reprocess
11	2018	CO	20	Reactive Dye		180000	0	0	0
10	2018	CO	20	Reactive Dye		180000	0	0	0
10	2018	CO/PES	20	Double Dye (R...		498632	200	500	630
10	2018	PES	20	Disperse Dye		280000	0	0	0
9	2018	CO	20	Reactive Dye	Medium Shade	593000	0	0	0
9	2018	PES	20	Disperse Dye		78650	0	0	0
8	2018	PES	20	Direct Dye	Medium Shade	568000	0	0	0
7	2018	CO	20	Reactive Dye	Dark Shade	500000	0	0	0
7	2018	PES	20	Direct Dye	Light Shade	400000	0	0	0
6	2018	CO	20	Reactive Dye	Dark Shade	210000	0	0	0
6	2018	CO/PES	20	Double Dye (R...		123450	2340	0	0
6	2018	PES	20	Disperse Dye		187600	0	0	0
5	2018	CO	20	Reactive Dye		300000	0	0	0
5	2018	CO/PES	20	Double Dye (R...		320000	0	0	0
5	2018	PES	20	Disperse Dye		150000	0	0	0
4	2018	CO	20	Reactive Dye		234000	0	0	0
4	2018	PES	20	Direct Dye		575000	0	0	0
1	2018	CO	20	Optical White Dye		15500	0	0	0
1	2018	CO	20	Fabric Wash		80000	0	0	0
1	2018	CO	20	Reactive Dye	Dark Shade	150000	0	0	0
1	2018	CO/PES	20	Double Dye (R...	Medium Shade	89000	0	0	0

Record 1 of 24

Chemicals Consumption Data



The screenshot displays the GOTS Monitor (Water/Energy) 2.0 software interface. The main window title is "GOTS Monitor (Water/Energy) 2.0". The interface includes a sidebar with navigation options: PRODUCTION DATA, DASHBOARDS, PROFILER, and ADMINISTRATION. The main content area shows a table of chemical consumption data under the "CHEMICALS" tab. The table has columns for Month, Year, Chemical, Quantity, and Unit. The data is as follows:

Month	Year	Chemical	Quantity	Unit
	1	2018 Caustic	3040000,65	kg
	1	2018 Salt	3205620,85	kg
	1	2018 Soda Ash	2958620	kg

At the bottom of the table, there is a pagination control showing "Record 1 of 3". The Windows taskbar at the bottom of the screen shows the system tray with the date "19/10/2" and time "11:47".

Utilities Consumption Data



GOTS Monitor (Water/Energy) 2.0

PRODUCTION DATA | DASHBOARDS | PROFILER | ADMINISTRATION

→ PRODUCTION → CONSUMPTIONS → CHEMICALS

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Month	Year	Utility	Utility Source	Consumption	Unit
10	2018	heat	Coal	133567	kg
10	2018	power	Grid Electricity	372000,35	kWh
10	2018	Water	BoreHole	39917	m3
9	2018	heat	Coal	138000	kg
9	2018	power	Grid Electricity	234050	kWh
9	2018	Water	BoreHole	39000	m3
8	2018	heat	Coal	138000	kg
8	2018	power	Grid Electricity	256089	kWh
8	2018	Water	BoreHole	26000	m3
7	2018	heat	Coal	148000	kg
7	2018	power	Grid Electricity	410000	kWh
7	2018	Water	BoreHole	58000	m3
6	2018	heat	Coal	159000	kg
6	2018	power	Grid Electricity	318000	kWh
6	2018	Water	BoreHole	48000	m3
5	2018	heat	Coal	151500	kg
5	2018	power	Grid Electricity	365000	kWh
5	2018	Water	BoreHole	39000	m3
4	2018	heat	Coal	130000	kg
4	2018	power	Grid Electricity	250000	kWh
4	2018	Water	BoreHole	35000	m3

Record 1 of 28

11:46 19/10/2

Categories of Analysis

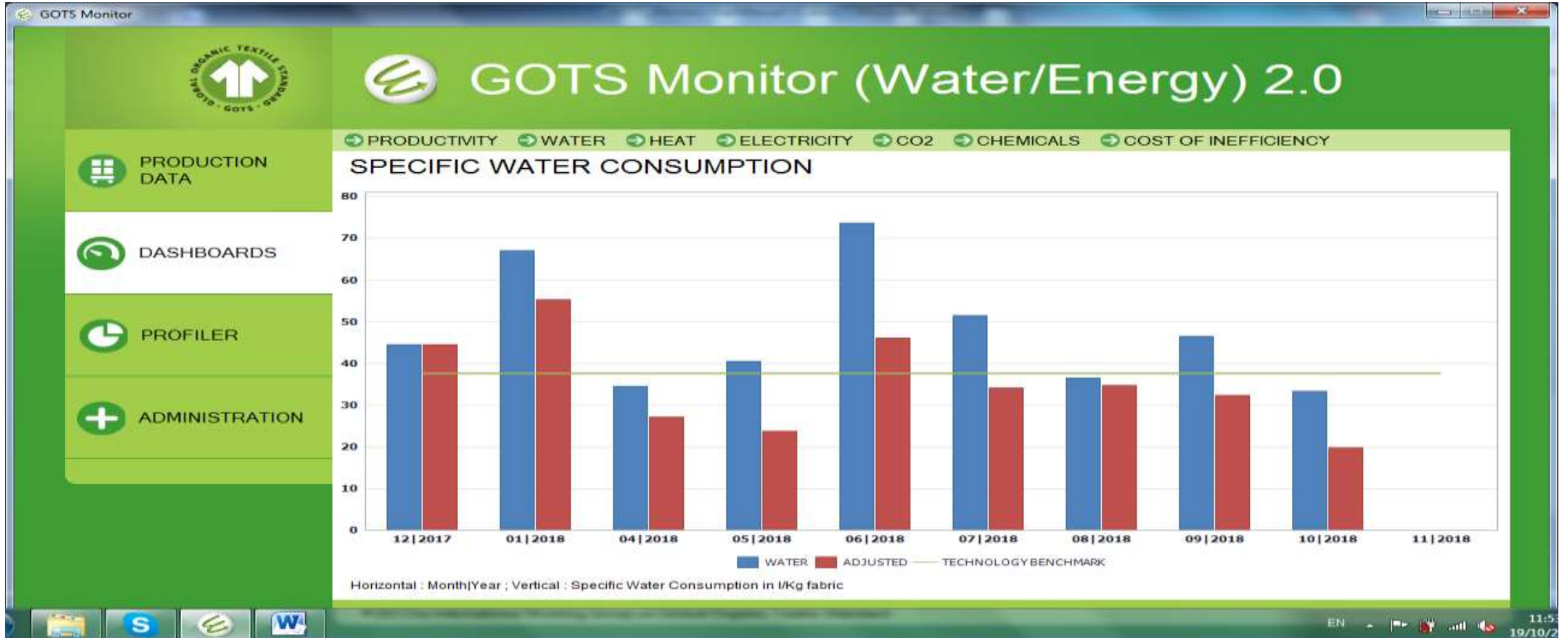


Graphical representation of monthly data for the below categories

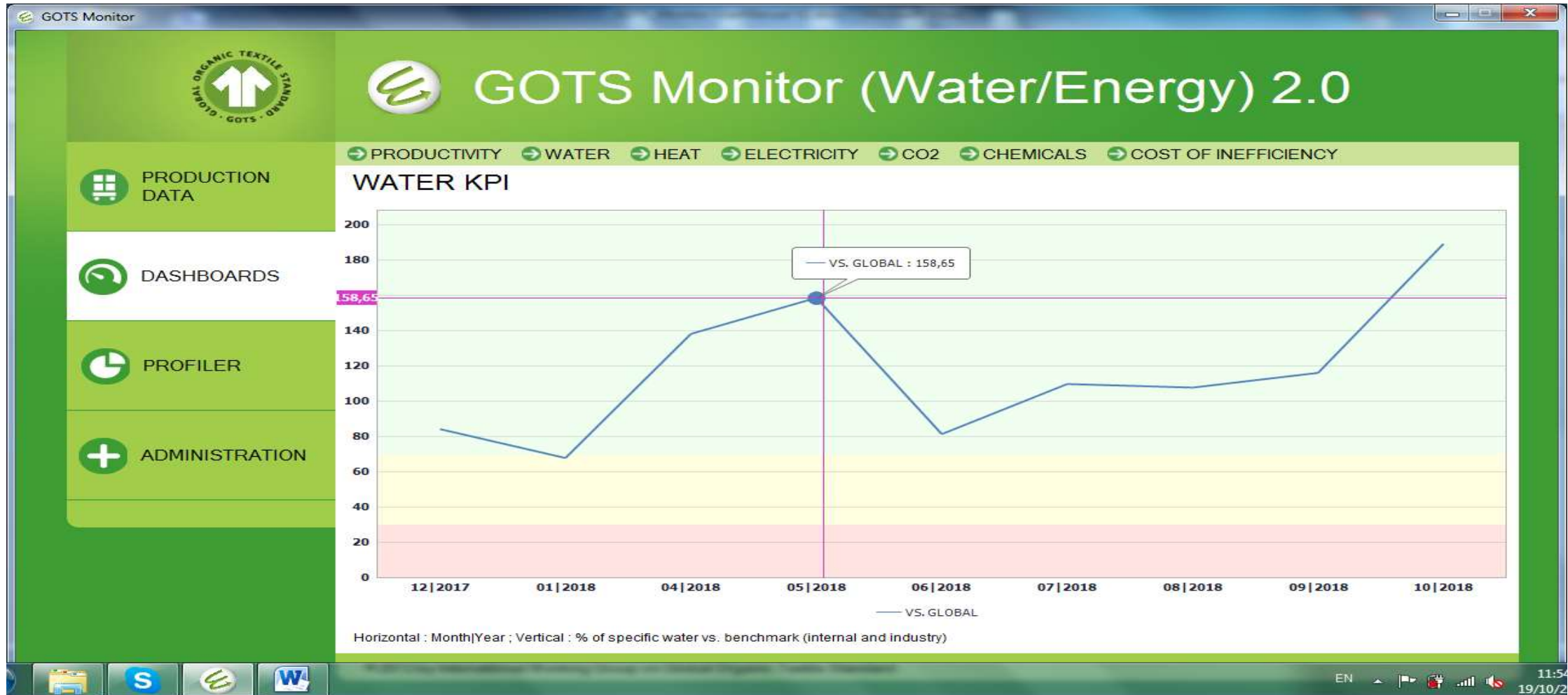
1. Productivity
2. Specific Water Consumption in l/Kg of output
3. Specific Heat Consumption in MJ/kg of output
4. Specific electricity consumption in kWh per kg of output
5. CO₂ in kg CO₂/ kg
6. Chemicals consumption in g/L
7. Cost of inefficiency

Note: Benchmark values rely on published data (see Annex G.5 of User manual listing the respective sources).

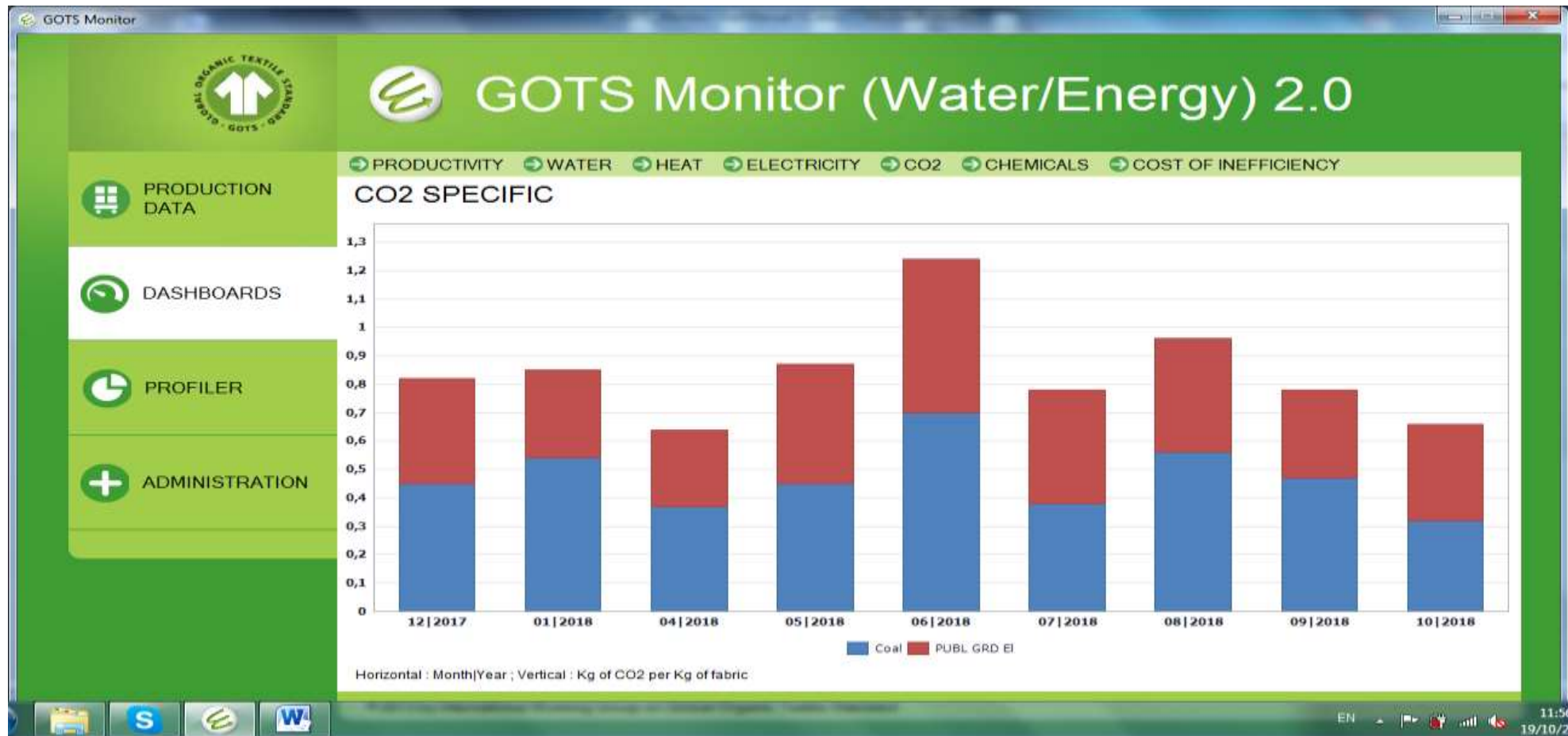
Specific Water Consumption



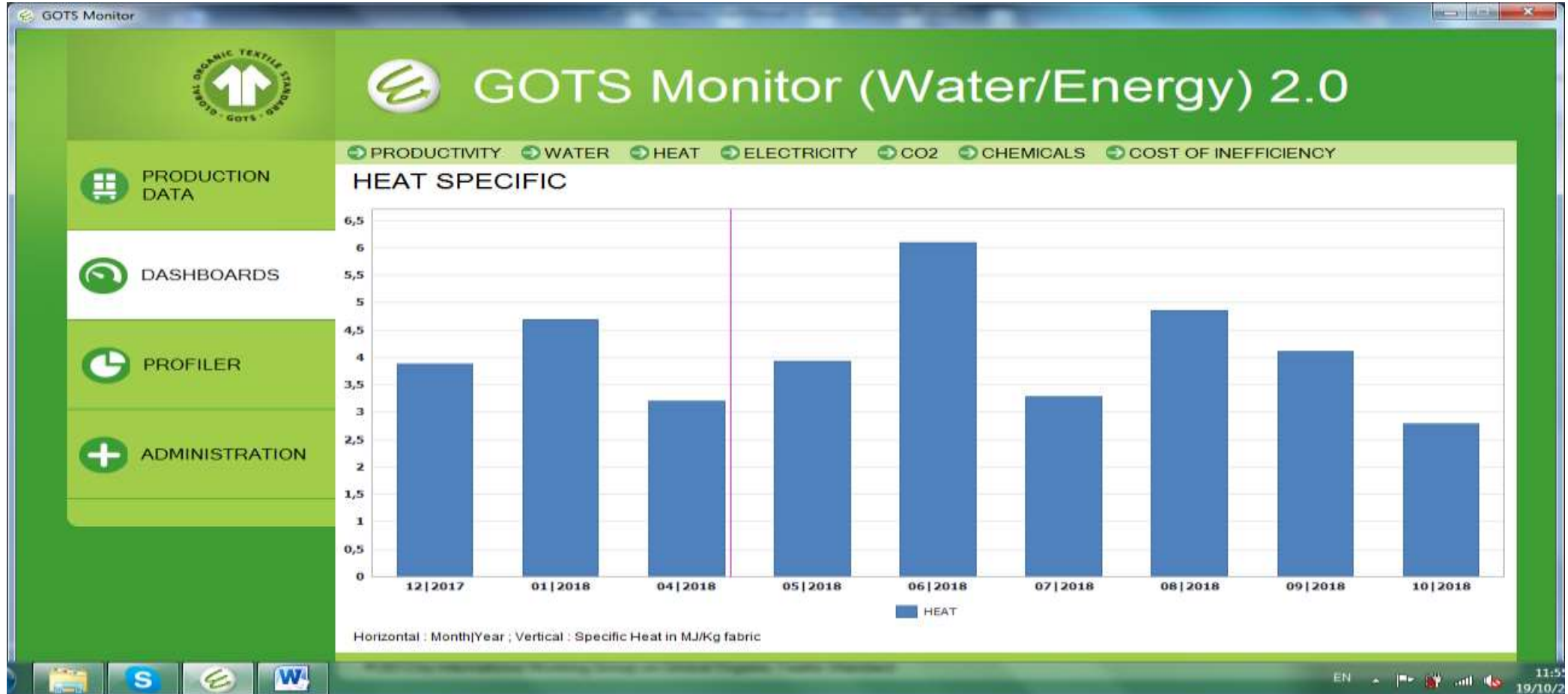
Water KPI (Efficiency)



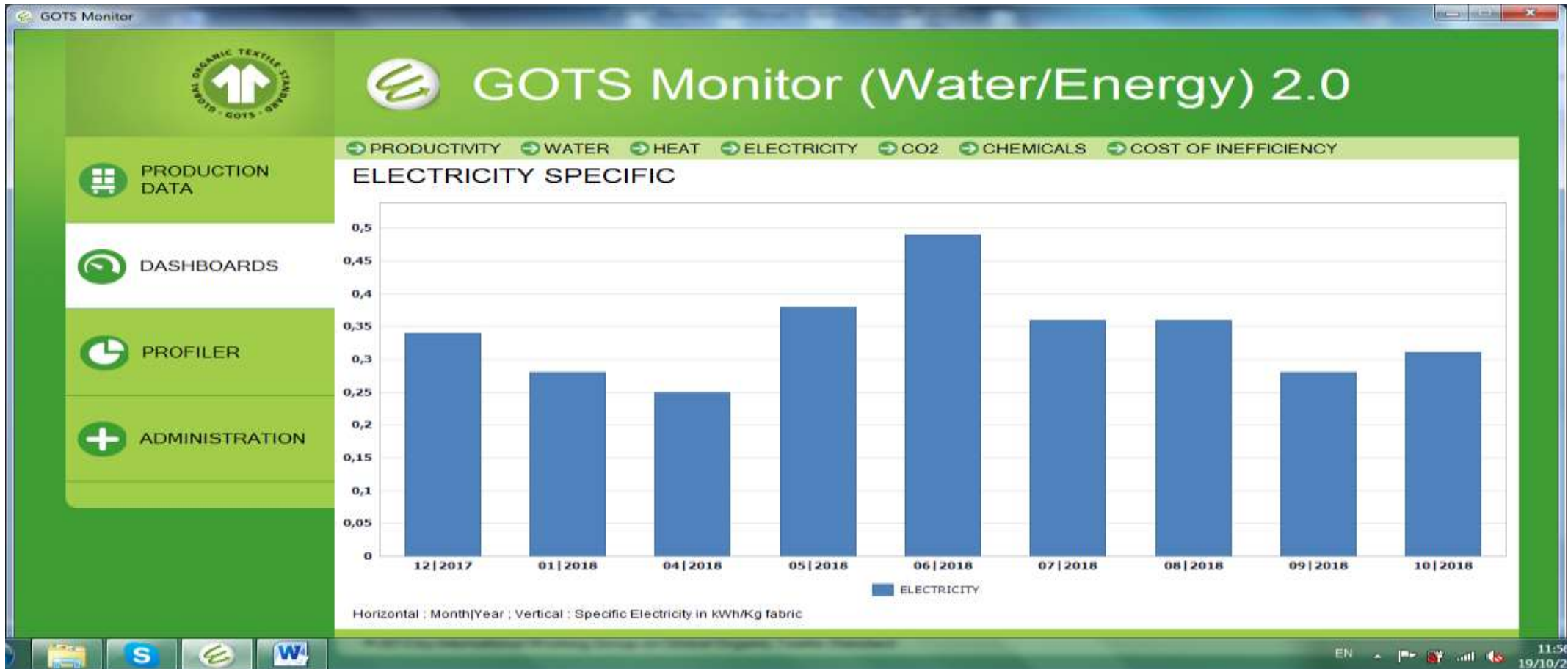
Specific CO2 Emissions



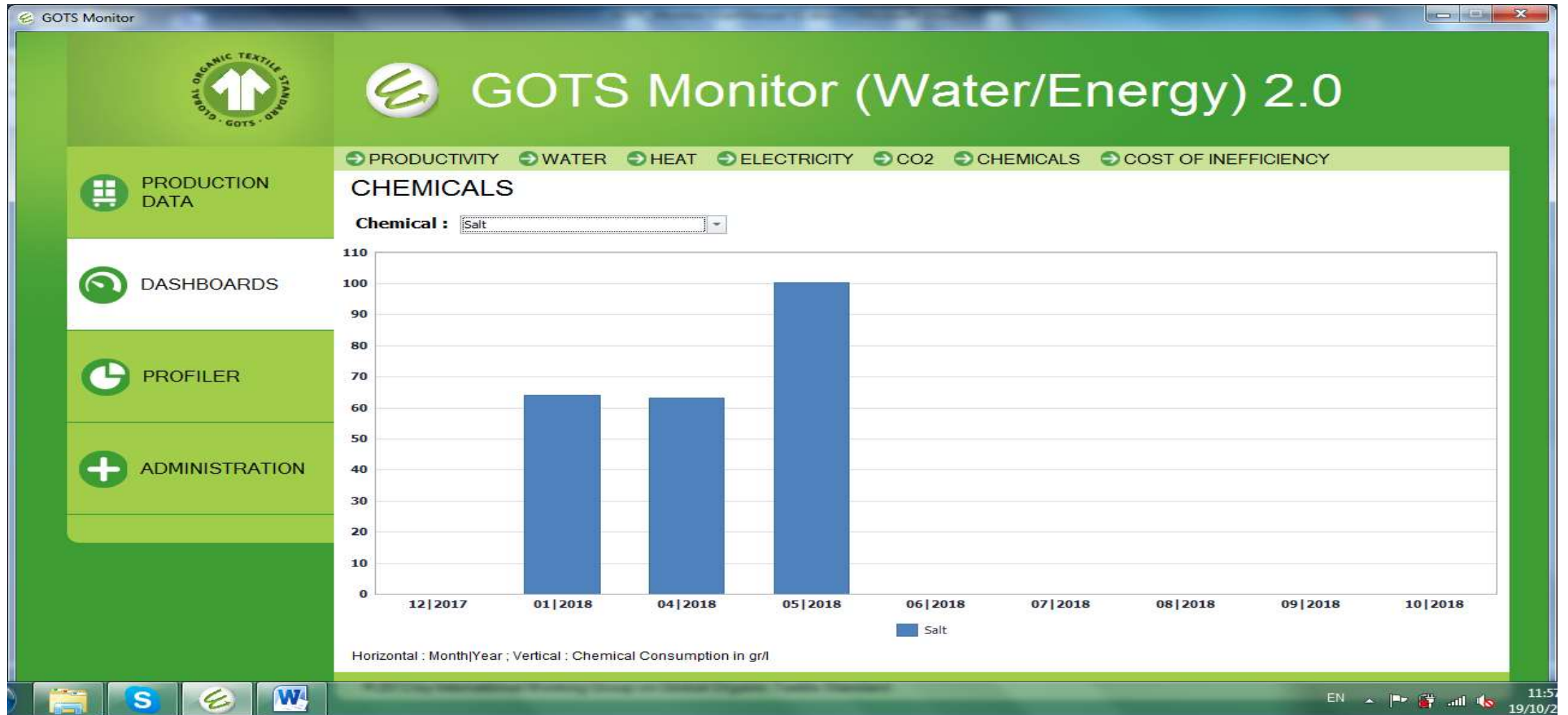
Specific Heat Consumption



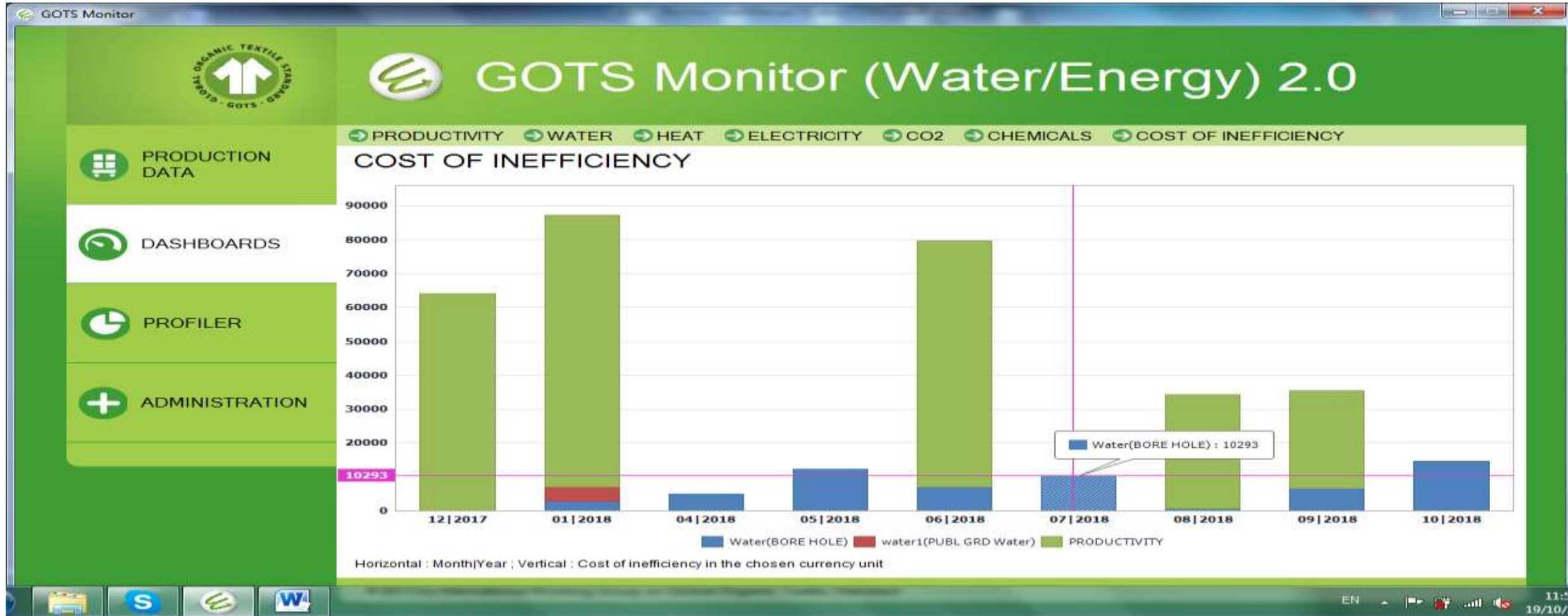
Specific Electricity Consumption



Specific Chemicals Consumption



Cost of Inefficiency



Support



Support for GOTS Monitor Users (FREE)- Sustainable Solutions Limited.



Software Knowledge Base Updates

Annual Software updates will be released and distributed to the users free-of-charge covering

- Major technological advance (knowledge base upgrade)
- GOTS Standard Revisions

Free Supporting Services for the Software Users

The following Support Services are available to the Tool Users :

- Support Hotline **during Installation** (email to GOTSmonitor@sustainable.eu)
- Support Hotline (email to GOTSmonitor@sustainable.eu)

Optional Services (PAID)- Systainable Solutions Limited.



In addition to the free-of-charge Tool License, Two optional **Paid** annual Service Levels will be available to the GOTS W/E Monitor users:

Service Level 1 includes

- Right to obtain **new versions** with new features (such as imports/ exports from/ to various 3rd party applications/ initiatives) that will be added to the tool as needed/ decided
- Annual Service Fee is **€500/ annum** per installed/ registered system license

Optional Services (PAID)- Systainable Solutions Limited.



Service Level 2 includes

- Service level 1 and
- Monthly Analysis Services and **personalized** feedback (performance reports) with suggestions to improve, troubleshooting advise etc. Hereto, the user's database will be sent automatically to our central analysis server.

Annual Service Fee amounts to **€950** (level 1 is included)

To obtain the optional Service levels an email will have to be directly sent to GOTSMonitor@systainable.eu. Further instructions will be provided then.

Thank you!

