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Material ready for toolbox implementation

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Dissemination level: PU

IMPAWATT

IMPlementAtion Work and Actions To change the energy culTure

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27.06.2019	Rev1	VTT	PLA	
14.02.2020	Rev2	VTT		
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1 Executive summary

D3.4 represents a collection of previously created deliverables:

- Content of 6 specific country surveys (D3.1, submitted in M11),
- Energy management knowledge repository (D3.3, submitted in M12)

and the enabling energy rational behaviours mechanism part of D3.2. The picture below summarizes the energy rational behaviours mechanism steps.

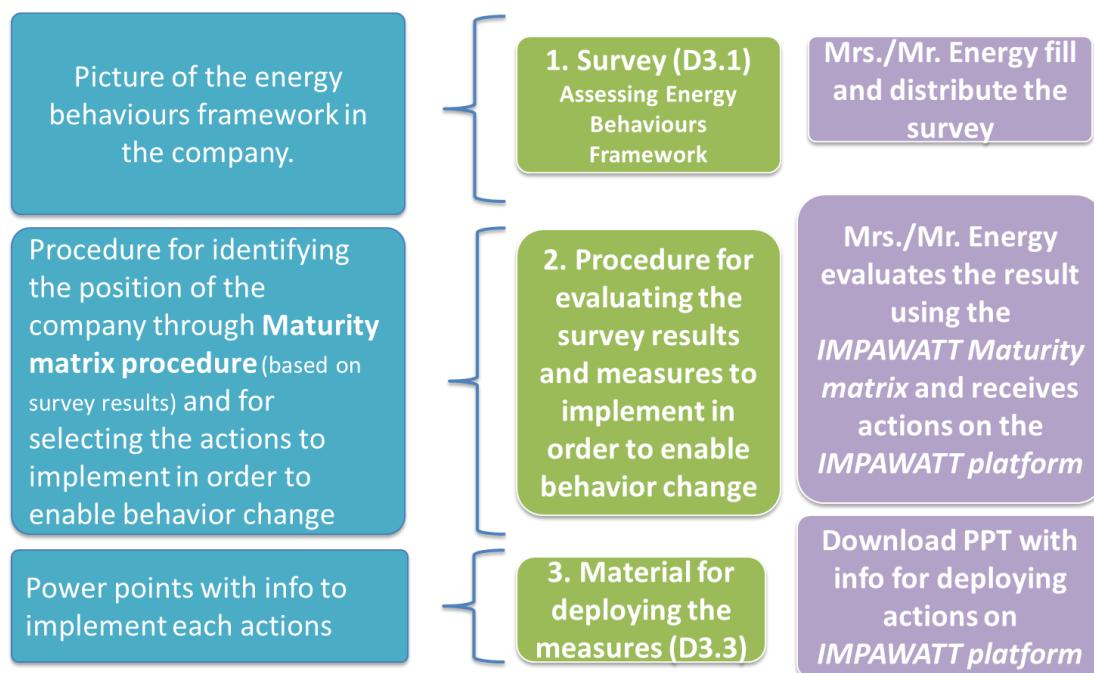


Figure1. Energy rational behaviours mechanism steps

In a nutshell, WP3 procedure for energy rational behaviours mechanism, and therefore the energy culture, in a company consists of:

- investigating the energy framework of a company by means of a **survey** (T3.1)
- evaluating the **maturity matrix** (T3.2) related to the energy culture pillars by means of survey results
- suggesting **actions** to undertake (T3.3) for enhancing the maturity level of each energy culture pillar using maturity matrix status of a company

VTT has been in charge of the creation process, supported by AEA. Other partners PLA, CCI, ENV and SEN contributed by creating preparations as part of D3.3 and reviewing the survey of D3.1.

For more info please refer directly to the submitted deliverables (D3.1 "Energy behaviours framework surveys" and D3.3 "Energy management knowledge repository")

The energy rational behaviours mechanism has been tested in a workshop in Turin. The picture below shows companies, partners and AB members involved in fillin-in the survey with the help of an oline tool.

Table 1 : Attendees from the workshop

Name	Number of representatives present
PLA	1
AEA	1
ENV	3
VTT	2
CCI	2
External Advisory Board (EAB)	3
Other enterprises	4

2 Documents library

The present report mentions documents issued from D3.1 and D3.3 which are listed in the table below.

All documents are translated in French, German and Italian. Only selected documents are translated in Finnish, since original English versions are suitable for the use with Finnish companies.

They are available on the national IMPAWATT platforms:

- EU central platform: <https://eu.impawatt.com/>
- Austria: <https://at.impawatt.com/>
- Germany: <https://de.impawatt.com/>
- Finland: <https://fi.impawatt.com/>
- France: <https://fr.impawatt.com/>
- Italy: <https://it.impawatt.com/>
- Switzerland: <https://fr.impawatt.com/>

The following table give links to directly access to one specific document:

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Documents on national platforms Translations and/or adaptation to national context											
Del no	Doc no	Document name	Document Type	File Type	EU (Basis) English	Finland Finnish/English	France French	Switzerland French	Germany German	Austria German	Italy Italian
1	D3.1	3.1 Energy behaviors Survey for employees	Quiz	Quiz	https://eu.impawatt.com/searchMeasures/show/tWfsRaIvhv7eRgPVBiY-zZOT%3D	https://fi.impawatt.com/searchMeasures/show/dzklqJaHb85twEwGz1M94oa2s%3D		https://ch.impawatt.com/searchMeasures/show/g4KUvhSe713XpHeQdfqgnr2ew%3D	https://de.impawatt.com/searchMeasures/show/gSxpabfAHVekFyApOzIPGtWlcTnCV8hdOsJQDUREdihx6B%3D	https://at.impawatt.com/searchMeasures/show/bwcshQRkrin2fOrmieV6RoxA20%3D	https://it.impawatt.com/searchMeasures/show/mNuHQRkrin2fOrmieV6RoxA20%3D
2	D3.1	3.1 Energy behaviors Survey for energy managers	Quiz	Quiz	https://eu.impawatt.com/searchMeasures/show/p9tj6LcGzSr1gg0CULpj6_bw%3D	https://fi.impawatt.com/searchMeasures/show/qh598mNuv_W8zLogInhbzNhJF%3D		https://ch.impawatt.com/searchMeasures/show/g4ZNmdO_ozaPELij82SV_1J5f4%3D	https://de.impawatt.com/searchMeasures/show/gxCl2mMmpcPILUvgzKGDxWL758%3D	https://at.impawatt.com/searchMeasures/show/atkS1pwcQxbzRxPpUsXhNA-o%3D	https://it.impawatt.com/searchMeasures/show/42QDjIdyxOxjsy4HKV4g%3D

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Documents on national platforms Translations and/or adaptation to national context											
Del no	Doc no	Document name	Document Type	File Type	EU (Basis) English	Finland Finnish/English	France French	Switzerland French	Germany German	Austria German	Italy Italian
1	D3.3	1 Choose systems with low base consumption	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/wkxU4ClfB6V-NlmcQcjd3%3D%3D	https://fi.impawatt.com/searchMeasures/show/EH3JEhxNa2ChDfjIihh7hdkt%3D	https://ch.impawatt.com/searchMeasures/show/gW_Lk06n6MvWjBL-iQiCvwW%3D	https://de.impawatt.com/searchMeasures/show/607zv8RSGGZ9n264arNyImQcRE%3D	https://at.impawatt.com/searchMeasures/show/MFy6TxWgRkDvg3eeeo2Yv1s5RfcowZloQ700czTrnAE%3D	https://it.impawatt.com/searchMeasures/show/5fRfcowZloQ700czTrnAE%3D	
2	D3.3	2 Optimize control and choose default operation of devices/systems	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/MWVx67l0GfVuYn65xAfjhKnxQ%3D%3D	https://fi.impawatt.com/searchMeasures/show/ujMgbp0yg76uRQGeEdyQbLDP%3D%3D	https://ch.impawatt.com/searchMeasures/show/RKRp4N8ghEVsacetQ5MwmDaedip4jkbNg_Ad4MoVqVi%3D	https://de.impawatt.com/searchMeasures/show/vv_V7qJLmhslPJm4vQ2FBpaNU_Fah4DTjRft-GpzSNcg%3D	https://at.impawatt.com/searchMeasures/show/AFWVIZ4tV0h7Pjgjn1Mbnd8%3D	https://it.impawatt.com/searchMeasures/show/yV1z4tV0h7Pjgjn1Mbnd8%3D	
3	D3.3	3 Allow easy ways to save energy	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/L-shkptCvbSc5GAU9jW-gw%3D%3D	https://fi.impawatt.com/searchMeasures/show/Edq5kfSz1eORzqmCcVDOaPEy%3D	https://ch.impawatt.com/searchMeasures/show/Ob3kYX-8QUG780A7V4mOHg0ln%3D	https://de.impawatt.com/searchMeasures/show/o65s0YcRinr2KiBqvKz9n9IIZG%3D	https://at.impawatt.com/searchMeasures/show/VTfpvD-fyvf1YpMkZjzI2PAikl%3D	https://it.impawatt.com/searchMeasures/show/ZQbwD1K6FgWaPnxSPik%3D	
4	D3.3	4 Support employees with information that gives advice	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/fS3AfEvzcrwn3o55NzNh20u1w%3D%3D	https://fi.impawatt.com/searchMeasures/show/hv7ezWvA2WytWvWvSa0xUzNzon0w%3D	https://ch.impawatt.com/searchMeasures/show/dCxx5NvTenizFkGCpQJO1%3D	https://de.impawatt.com/searchMeasures/show/7DOKPHHEAHnxJhETf6Pyqw%3D	https://at.impawatt.com/searchMeasures/show/7DOKg4PPDWtNH5jwQUbVbc%3D	https://it.impawatt.com/searchMeasures/show/2n0VJ7gAh0phCnvl-B8Mciu38%3D	
5	D3.3	5 Use visualization to inform about energy waste or increased energy consumption	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/pzubVA5oGuCokg5v2ykqimg%3D%3D	https://fi.impawatt.com/searchMeasures/show/4E1geeDOSD0ffU5QmCIVN9ksw%3D%3D	https://ch.impawatt.com/searchMeasures/show/xNBRaebsfjRymdfg4jHv1Cpw%3D%3D	https://de.impawatt.com/searchMeasures/show/3YVv0m6iMFHf1Pc8m8fMfSqsDyBL5MEd68A%3D%3D	https://at.impawatt.com/searchMeasures/show/P5C90gkM6r-iEY%3D	https://it.impawatt.com/searchMeasures/show/d0qlx9tobJshHe0MuIyB6ug5Aw%3D	
6	D3.3	6 Support employees to pass on information to others	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/xgrmWe8t84227luWx9XxfiU9eA%3D%3D	https://fi.impawatt.com/searchMeasures/show/xtyp3e-73-7OQuKAblyLiYtk6E%3D	https://ch.impawatt.com/searchMeasures/show/rfttuYTu7112Rt81scaplHew%3D	https://de.impawatt.com/searchMeasures/show/1PjZv3hNzWbjCvFjJ246ktlh%3D	https://at.impawatt.com/searchMeasures/show/xcmg3hnsM267z1mimpawatt.com/searchMeasures/show/1Rlk%3D	https://it.impawatt.com/searchMeasures/show/WefbOspkblejkeBP8vk%3D	
7	D3.3	7 Bring energy detectives	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/rd6cwMPQHD-Q0HaL4z289fhWtQ3D%3D	https://fi.impawatt.com/searchMeasures/show/rd6cwMPQHD-Q0HaL4z289fhWtQ3D%3D	https://ch.impawatt.com/searchMeasures/show/cGNLk7Kcd-HjEPThqmEv7kMg%3D	https://de.impawatt.com/searchMeasures/show/gpm9gtk0lPeqSLKqhRwtKp4W2S6uylzaq2mbCUcaOo5%3D	https://at.impawatt.com/searchMeasures/show/Mk5Cy19ulaglmEyHpwk%3D	https://it.impawatt.com/searchMeasures/show/M0j3U%3D	
8	D3.3	8 Introduce gaming solutions that make people learn energy efficient behaviours	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/ATIBM_r1L4DvbCfktMfIx0ueA%3D%3D	https://fi.impawatt.com/searchMeasures/show/BWUo4F_T-p-a_1ePga2gNfU3thdMA4k3v%3D	https://ch.impawatt.com/searchMeasures/show/cwmF6BzK2FfVbckspCoEB342QwvK%3D	https://de.impawatt.com/searchMeasures/show/gVxGpk%3D	https://at.impawatt.com/searchMeasures/show/gD3wVdgGsfrKUmP8n5BwvK%3D	https://it.impawatt.com/searchMeasures/show/1K2eVn-lv1Frz-	
9	D3.3	9 Monitor energy consumption	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/r124archMeasures/show/evztFxJEDsBA4ktDdkJ0YK-GQ%3D%3D	https://fi.impawatt.com/searchMeasures/show/RVJpge093v9NEFBLo04%3D	https://ch.impawatt.com/searchMeasures/show/Qfyz5IhYEcGTUbkrXqXqgSiq%3D	https://de.impawatt.com/searchMeasures/show/WrGkR-s-6LPkCZpf-7cbhbxLY%3D	https://at.impawatt.com/searchMeasures/show/q93p3iuHcfpgchlyYOECyQo%3D	https://it.impawatt.com/searchMeasures/show/0EVjxR4qIHyToWDPF2JuuvK4Hes%3D	
10	D3.3	10 Compare energy performance between similar groups in organization	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/-v98IDrM0s2ltorcXeqnWEdA%3D%3D	https://fi.impawatt.com/searchMeasures/show/adv4lvnNcdGHibi0iwnpteR9g%3D	https://ch.impawatt.com/searchMeasures/show/kZYkv-eT9vaKK18RxVdu4x4A%3D	https://de.impawatt.com/searchMeasures/show/RoWkbURsCmvmxJlhpo6%3D	https://at.impawatt.com/searchMeasures/show/1av4URSZPYC4OpicmvxJlhpo6%3D	https://it.impawatt.com/searchMeasures/show/SIM1zU6OzA1pqmZ1b28Y7Q%3D	
11	D3.3	11 Establish a process by which employees can make comments	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/1AEU_m6u5iWXjB8Sohilu-u0YQ%3D%3D	https://fi.impawatt.com/searchMeasures/show/8cvjoleM6Cs_9g3q8trPmLm_A%3D	https://ch.impawatt.com/searchMeasures/show/yhWleIFCE-HEldh2fro-AtPmW%3D%3D	https://de.impawatt.com/searchMeasures/show/8Cr9URSZPYC4OpicmvxJlhpo6%3D	https://at.impawatt.com/searchMeasures/show/N0fzXNNiNzGn5bLSArDKJ3gb6a%3D	https://it.impawatt.com/searchMeasures/show/OOFzDxAHqIwl0eiLrsBtosVIQ%3D	
12	D3.3	12 Organize workshops where employees can share their ideas	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/C-bUcfxEjmzb_yJ56e2uAvky%3D%3D	https://fi.impawatt.com/searchMeasures/show/lpuYn0q3m8xwmu6poAbKw%3D	https://ch.impawatt.com/searchMeasures/show/Wwi675Gx7Eoy2fk3xrc0-HOE%3D	https://de.impawatt.com/searchMeasures/show/1GMgpyWxx0U8Re6vbiYVE4P1Q8jg%3D%3D	https://at.impawatt.com/searchMeasures/show/v3v83bUbfw6Dx68aHn7rsGupFw%3D	https://it.impawatt.com/searchMeasures/show/AoHs6k6NzrVueOXUPME2AR4a%3D	

13	D3.3	13 Give employees a possibility to use a social platform	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/vk1MoXtYyGIx23MjboCwxdIw%3D%3D	https://fi.impawatt.com/searchMeasures/show/Ov4nsItWDunwFU621o5hglzoMK3D	https://fr.impawatt.com/searchMeasures/show/xq45dRNlta9lwRBXHxH150f7w%OGqbINKhQeBp2vHKf13fdN3D%3D	https://ch.impawatt.com/searchMeasures/show/1icq4%3D	https://de.impawatt.com/searchMeasures/show/kFwl4%3D	https://at.impawatt.com/searchMeasures/show/zQkreDhVRkvX20GzY_QZTke1L1rSp6M5dQwy8RVY%3D	https://it.impawatt.com/searchMeasures/show/SbTzKSEzMO-L1rSp6M5dQwy8RVY%3D
14	D3.3	14 Integrate energy conservation and reduced emissions i	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/b5x7kk31m8M1dls2c6y4-%CX5A%3D%3D	https://fi.impawatt.com/searchMeasures/show/phNbk3T5_hbDrMJvp326x0_dZ74%3D	https://fr.impawatt.com/searchMeasures/show/28VkuOBd4bLq24yU1DKtbJCMg%3D%3D	https://ch.impawatt.com/searchMeasures/show/gp2TbtkHHNIKDI2kIdCZqgOKyE3fReqxOghgodQOHhCuYbpR8%3D	https://de.impawatt.com/searchMeasures/show/bo3g%3D	https://at.impawatt.com/searchMeasures/show/foxP33fReqtk54fNg3BqIVR2zp0%3D	https://it.impawatt.com/searchMeasures/show/acz_ueKO5NDgajN8RbjUf18mW%3D
15	D3.3	15 Establish procurement criteria	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/KLwT1-dq3isbgqykz02Tg-V-QIO%3D%3D	https://fi.impawatt.com/searchMeasures/show/fxf7Gldz-1SE7lNHg2BEaYDm38%3D	https://fr.impawatt.com/searchMeasures/show/cfyHq6wnvaFrNSxbMg5ojgDNnu7klCiGj92j13ge4t0u0%3D%3D	https://ch.impawatt.com/searchMeasures/show/Icbh6wnvaFrNSxbMg5ojgDNnu7klCiGj92j13ge4t0u0%3D%3D	https://de.impawatt.com/searchMeasures/show/zu8P91_Fxwp15AgDnyzDpnu0%3D	https://at.impawatt.com/searchMeasures/show/HRK1ek05NDgajN8RbjUf18mW%3D	https://it.impawatt.com/searchMeasures/show/acz_ueKO5NDgajN8RbjUf18mW%3D
16	D3.3	16 Organize workshops where employees learn to know the energy targets of company	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/z5-DbCrNbfmOCAnPMC4kk9rcbg%3D%3D	https://fi.impawatt.com/searchMeasures/show/WP9EV1jpSchv66CZKO_BpPLWoWx%3D	https://fr.impawatt.com/searchMeasures/show/siww85c-xROVv-yh2505j045A%3D%3D	https://ch.impawatt.com/searchMeasures/show/Md0gBeKGvFyydxPs%3D	https://de.impawatt.com/searchMeasures/show/s_Jc_kaBwRAj-DHSwI7TrWpAhS%3D	https://at.impawatt.com/searchMeasures/show/TFNQnRffyvz3CuDM0BpOkkoRkg%3D	https://it.impawatt.com/searchMeasures/show/mDRiQnRffyvz3CuDM0BpOkkoRkg%3D
17	D3.3	17 Energy notion	Presentation	Ppt	https://eu.impawatt.com/searchMeasures/show/hnruSxQkyp9rbYk3e7tGOrLQ%3D%3D	https://fi.impawatt.com/searchMeasures/show/ythkRcfPHK4otWJ7l20DqdAaE%3D	https://fr.impawatt.com/searchMeasures/show/vNxPG1KNUffppOFerLCPx6vURA%3D%3D	https://ch.impawatt.com/searchMeasures/show/u5tRtRBOYAUkaAnqFhdRtxro0%3D	https://de.impawatt.com/searchMeasures/show/M1Ae6K3Vrx4005IEQWYo8At6zs%3D	https://at.impawatt.com/searchMeasures/show/BzTWvE534LDzColazTgmetpjae6K3Vrx4005IEQWYo8At6zs%3D	https://it.impawatt.com/searchMeasures/show/BzTWvE534LDzColazTgmetpjae6K3Vrx4005IEQWYo8At6zs%3D