

LIFE12 ENV/ES/000222



# LIFE Green TIC

Reducing CO₂ footprint of Information and Communication Technologies.

## Action E2. After – LIFE Communication Plan

# E2.1: After-LIFE Communication Plan (English)

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	🗹 Public	
Dissemination	Internal (partners and collaborators)	
level:	<ul> <li>Confidential, only for members of the consortium (including the Commission Services)</li> </ul>	

September 2016



LIFE12ENV/ES/000222

1/7

#### Contents

1.	LIFE	Green TIC PROJECT	2			
	1.1.	Project description	2			
	1.2.	Main results of the Project	2			
2.	STR	ATEGY OF RESULTS COMMUNICATION AND DISSEMINATION	3			
	2.1.	Target groups	3			
	2.2.	Communication and dissemination of project results	3			
	2.2.	1. Dissemination materials development	1			
	2.2.	2. Fora in which the project has been presented	1			
	2.2.	3. Other actions (publications, media coverage and others)	1			
	2.3.	Communication and dissemination actions after the LIFE project	5			
	ANNEX	X I - BUDGET	7			
	ANNE)	X II – Abbreviations used	ANNEX II – Abbreviations used			



### 1. LIFE Green TIC PROJECT

#### 1.1. Project description

The main objective of LIFE Green TIC project is to contribute to the reduction of  $CO_2$  emissions from the Information and Communication Technologies (ICT) sector. It is estimated that the ICT sector currently consumes 10% of the total amount of energy consumed in the European Union (EU) and it is responsible for 4% of its  $CO_2$  emissions.

The specific objectives set to enhance the positive impact of ICT on the environment and to reduce their ecological footprint are:

- To demonstrate and quantify the potential that a smarter use of ICT has for reducing CO<sub>2</sub> emissions.
- To model and promote good practices and green procurement criteria in the ICT sector.
- To demonstrate the added value of new devices, ICT applications and procedures to reduce the emissions and to contrast, through pilot demonstrative actions in the fields of administration, education and urban management.
- To encourage all ICT users to adopt responsible behaviours when using these technologies, so as to help to reduce their energy consumption.
- To boost the citizens and small business initiatives to develop ideas and ICT solutions to help strengthen environmental management using open data, environmental information and social networks.

The project has been coordinated by Fundación Patrimonio Natural de Castilla y León and has counted on the collaboration of Fundación San Valero and Logroño City Council as partners.

#### 1.2. Main results of the Project

Along the 36 months of project duration (from 2 September 2013 to 31 August 2016), many different and fruitful tasks have been developed leading to, among others: the demonstration of ICT performance in emission reduction policies in several fields; the publication of guidelines of interest for a general public; the dissemination and training in Green ICT; boosting of public participation for the integration of Green ICT concepts in several sectors such as university education or the professional tasks of IT personnel, purchasing departments, and IT managers in the public administration.

A summary of the main results that have been reached in the LIFE Green TIC project framework is shown in the table below:

Activities	Main results
Development of Green ICT Strategies and Action Plans	<ul> <li>Common methodology for the preparation of the Green TIC Strategies and Action Plans.</li> <li>3 Green TIC Strategies / Action Plans (one per partner, adapted to the specific implementation sector: ICT equipment inventory, data bases of technical details and consumptions, tasks to be performed by every partner.</li> <li>Monitoring systems for CO<sub>2</sub> emissions associated with pilot actions.</li> </ul>
Pilot action 1: virtualization in an administrative building	<ul> <li>Green ICT Engineering project specific for PRAE building (Valladolid).</li> <li>Contract of supply and configuration of the necessary equipment for the development of the Green ICT solutions.</li> <li>Monitoring data base of the pilot action.</li> <li>Avoided emissions: 8 t CO<sub>2</sub></li> </ul>



#### LIFE12ENV/ES/000222

3/7

Activities	Main results	
Pilot action 2: virtual campus virtual in educational settings (vocational training and University – FSV)	<ul> <li>Specific Green ICT Engineering project.</li> <li>Virtual campus for official higher vocational training courses.</li> <li>Virtual campus for postgraduate or university courses.</li> <li>PaperCut software for printing and copying management and control in entities under San Valero group.</li> <li>Implementation of tools: <i>Meeting</i> or multimedia collaboration applications; desktops and applications virtualization.</li> <li>Monitoring data base of the pilot action results.</li> <li>Avoided emissions: 97 t CO<sub>2</sub></li> </ul>	
Pilot action 3: environmental management in a Smart City (Logroño)	<ul> <li>Specific Green ICT Engineering project.</li> <li>Extension of the data centre to support the pilot action.</li> <li>Implementation of a remote noise and air quality monitoring system in a "pilot street" with LED lighting.</li> <li>Microsite with information on environmental quality.</li> <li>Environmental quality information integrated into the municipal app.</li> <li>Monitoring data base of the pilot action results.</li> <li>Avoided emissions: 47,12 t CO<sub>2</sub></li> </ul>	
Green Criteria for ICT procurement	<ul> <li>List of ICT devices that form the ICT product group open to green procurement criteria.</li> <li>Benchmarking: bibliographic review and analysis of experiences on the international use of green criteria for ICT procurement. Best practices collection.</li> <li>Analysis of available verification systems for the green procurement of ICT devices.</li> <li>Guidelines for the green procurement of ICT products.</li> <li>3 tender specifications standard templates or guidelines documents for the green public procurement of computers, imaging equipment and servers.</li> <li>5 training days on green procurement of ICT.</li> <li>Partners experience: implementation of the green criteria to the procurement of partner's ICT equipment.</li> </ul>	
Best practices in the smart use of ICT	<ul> <li>Review of literature, database and expertise on best practices in the use of ICT.</li> <li>Questionnaire on errors and bad practices – data base with results.</li> <li>Best practices guide for ICT users.</li> <li>4 informative infographics.</li> <li>Collection and dissemination of best practices and success stories.</li> </ul>	
Sustainability Lab	<ul> <li>"MiHuellaTIC" (my ICT footprint) blog.</li> <li>Tools for dissemination through social networks: Twitter account and Facebook profile. Creation of a Green TIC virtual community, active in social networks.</li> <li>My ICT Footprint photo contest.</li> <li>Generation of Green ICT solutions through participation: 67 ideas, 18 projects and 13 actions collected and disseminated as part of the Green ICT – Entrepreneurs competition (40 participating teams – about 150 young people (under 30 years) with different origins within the national territory). 4 awards to winners.</li> <li>Networking meeting between finalists of the Green ICT – Entrepreneurs and companies / technological centres from ICT and environment sectors.</li> </ul>	

## 2. STRATEGY OF RESULTS COMMUNICATION AND DISSEMINATION

#### 2.1. Target groups

Every partner has contributed to the dissemination of results, on global activities and every one of them specifically in their field of action. The diversity of potential beneficiaries of the project results is wide and includes professional sectors such as ICT or environment /ecoinnovation sectors, public administration, networks (such as the Smart cities network), the educative community and public in general.

#### 2.2. Communication and dissemination of project results

During the three years of project implementation, a high number of results communication and dissemination activities have been developed and are summarised below:



#### LIFE12ENV/ES/000222

#### 2.2.1. Dissemination materials development

Dissemination materials	Range
Project website: www.lifegreentic.eu	In Spanish and English. Visits: 19.039
Blog "MiHuellaTIC": <u>http://mihuellatic.lifegreentic.eu</u>	550 visits/month
Social networks: Twitter account, Facebook profile	950 followers in Twitter and 538 in Facebook
Project brochure	3000 copies in Spanish + 500 copies in English
Dashboard / notice boards	In the headquarters of the three project partners
Roll-up / poster	2 roll-ups used in several occasions, various posters for dissemination
GreenTIC personalised USB flash drive made in FSC wood	500 for project dissemination and information distribution
Project videos	1 initial dissemination video + 1 final results video

#### 2.2.2. Fora in which the project has been presented

Project partners have been very active in participating in national and international fora in which the project has been disseminated to stakeholders and potential results beneficiaries:

Ecoinnovation sector	ICT sector	Education sector	Public administrations and smart cities
<ul> <li>Greenweek 2014, Brussels</li> <li>Workshop on energy efficiency and climate change (Brussels, 04/06/2014)</li> <li>CONAMA – National Environmental Congress (Madrid, 24-27/11/2014)</li> <li>International Days in Critical Raw Materials – ICCRAM (Burgos, 25/06/2015)</li> <li>Local CONAMA (Málaga, 7- 8/10/2015)</li> </ul>	<ul> <li>Forum of the International Communication Union (Madrid, 18/09/2013)</li> <li>Aragón Open Data (Zaragoza, 06/02/2014)</li> <li>III Smart Energy Congress by Enertic (Madrid, 23/04/2014)</li> <li>MATELEC – International Fair of the Electric Industry (Madrid, 28/10/2014)</li> <li>Aragón ICT Forum (Zaragoza, 20/11/2014)</li> </ul>	<ul> <li>Hack for Good - #H4G (Valladolid, 16/04/2015) University of Valladolid</li> <li>Environmental Education and Communication National Congress - COMEA (Valladolid, 14/04/2015)</li> </ul>	<ul> <li>I Smart cities national congress (Madrid, 24/03/2015)</li> <li>Training courses in green ICT procurement and best practices, various cities and dates: Valladolid, Zaragoza, Madrid and Logroño between 18 February and 31 March 2016</li> <li>Murcia's Local Energy Agency. Conference on ICT Green procurement – 04/05/2016</li> </ul>

#### 2.2.3. Other actions (publications, media coverage and others)

The project has searched for specific media to disseminate the technical and specialized content of the project, for a more direct relationship with potential results beneficiaries:

- CyLDigital Magazine: 3 collaborations, including a monographic devoted to Green ITC.
- eSMARTCITY.es web portal: publication of several documents resulted from the project.
- Casadomo web portal: project presentation
- "Equipamientos y servicios municipales" magazine. Article published in 2014.
- "ECLAP al día" magazine. Article Published. ECLAP is the training service of the regional government.
- Communication published in the Book of Communications of the Spanish National Environmental Congress (CONAMA).
- Communication published in the Book of Communications of the I Smart Cities Congress.
- Articles published in several newsletters: Enertic, AETICAL and CONETIC, together with the digital newsletter of Logroño City Council "De Buena Fuente".



LIFE12ENV/ES/000222

#### 2.3. Communication and dissemination actions after the LIFE project

The following tables compile the foreseen communication actions for the After-LIFE period and Annex I specifies their associated costs (foreseen or estimated). It will be possible to add new actions along the following years as good dissemination opportunities arise.

ACTION 1 - GENERAL DISSEMINATION THROUGH THE WEBSITE / SOCIAL NETWORKS / MEDIA				
Task	Justification and public objective	Specifications	Responsible/s partner/s	
Project website maintenance	For 5 years: updating of certain pages (news, project documents). General public and Green TIC community (project followers).	4 news/year 5 photos/year 6 links to projects or initiatives (networking)	All partners	
Social networks of the project	The Twitter account will remain as an active source of dissemination of news and best Green TIC practices. Target audience: the virtual community of Twitter followers (ICT and ecoinnovation sectors).	100 tweets or retweets	FPNCyL	
Dissemination via websites and social networks of all partners	Every partner will disseminate Green TIC related news via their own media (websites and social networks, etc.). Aimed at specialized public of every organisation (public authorities, educational sector, environmental sector – ecoinnovation) and general public.	4 news/year in the website of every partner	All partners	
Press conference in Logroño	Press conference by the environment city councillor of Logroño to disseminate the results of the project and its continuation commitment. Aimed at general public of the city of Logroño.	4 <sup>th</sup> week of October 2016	Logroño City Council	

ACTION 2 - DIVULGACIÓN TÉCNICA EN JORNADAS, CURSOS, EVENTOS Y EN PUBLICACIONES				
Task	k Justification and public objective S		Responsible/s partner/s	
Written and oral communication in the X Energy Days of Ávila	An oral presentation will take place 7 November 2016 in the plenary session of the Conference in Ávila city. Aimed at public authorities and organisations working in energy management and saving.	Communication available in digital format (text and slides presentation)	FPNCyL	
Article for the magazine "Equipamientos y Servicios Municipales"	It will appear in the issue number 177 (third quarter of 2016) of this magazine specialized in local public administration reaching also ecoinnovation and environmental management companies.	Published in paper and electronic versions	Logroño City Council	
Training course on best environmental practices for offices.	Organised by the ECLAP (Public Administration School of Castilla y León) and aimed at local and regional civil servants, it will deal with best practices in the use of ICT and green public procurement. 20 participants. October - November 2016 in Valladolid.	Mixed coursed: face-to- face and on-line taught by personnel of the LIFE project	FPNCYL	

ACTION 3 - SENSIBILIZACIÓN SOCIAL Y EDUCACIÓN AMBIENTAL			
Task Justification and public objective		Specifications	Responsible/s partner/s
Environmental education workshops for kids	This kind of activities will be organised in the Centre for Environmental Resources of Castilla y León, in the Visitor's Centres of the Natural areas and in other Environmental education centres. Target public: kids and general public.	s 10 workshops in 2017 FPNCyL	
Workshop in the Scientific Park (University of Valladolid- UVA)	Action meant for families participating in the Week of Science organised by the Scientific Park of the University of Valladolid. Objective: awareness raising among general public on the responsible consumption of energy in ICT.	Workshop in the Scientific Park (University of Valladolid- UVA)	FPNCyL



LIFE12ENV/ES/000222

6/7

ACTION 3 - SENSIBILIZACIÓN SOCIAL Y EDUCACIÓN AMBIENTAL				
Task     Justification and public objective     Spendor		Specifications	Responsible/s partner/s	
Infographics available through EDUCACYL (the web portal of formal education – Regional Government of CyL)	The infographics developed in the project, graphically summarise the contents of the Best Environmental Practices for ICT users Guide. The idea is to reach young students, who are intensive ICT users and must know this information.	Link in www.educa.jcyl.es/es	FPNCyL	

ACTION 4 - CARTAS DE COMPROMISO Y BUENAS PRÁCTICAS GREEN TIC			
Task	Justification and public objective	Specifications	Responsible/s partner/s
Feedback and synergies from GreenTIC Letters of Commitment	I signatories: their actions and results will be nublished via		All partners
Newsletter of good ICT practices for civil servants	Logroño City Council will keep on sending to all its workers in a monthly basis the newsletter with tips and recommendations for a better use of ICT.	Via e-mail	Logroño City Council
Translation into English of the "Best Environmental Practices for ICT users Guide".	This manual will be available for use in other countries (EU and others).	Digital format for website	FPNCYL
Translation into English of the GreenTIC Letter of Commitment	This way, a wider audience will be reached and the Letter of Commitment could be used by other LIFE projects in the framework of networking actions	Digital format for website	FPNCYL
to Green TIC commitments commitments will continue among ICT users together with the n and continuous awareness raising and training using results of the project (green w		Paper format, 58352 numbers per issue with an impact of 282000 readers	FSV
Recruitment of adherence to Green TIC commitments and continuous awareness raising/ training	reen TIC commitments Catholic Schools network, aimed at both organisations and individual ICT users. Scope: regional (Aragón) and national		FSV
Recruitment of adherence to Green TIC commitments and continuous awareness raising/ training	The same as in the previous two actions will be done through the religious organisation "Cáritas Diocesana" of Zaragoza, aimed at ICT users.		FSV
International dissemination through collaboration with other UE organisations	FSV will profit their close collaboration with the Energy Agency of Graz (Austria), to actively disseminate and take advantage of the results and materials of the project. Specially focused in the educational and energy sectors in its region (Styria) and in Austria.	Means: mailing and participation in specialised events (energy efficiency and/or ICT)	FSV
"Education & training" strategy implementation	To introduce the dissemination strategy to new interesting actors for the educational sector using the network Alumni ESIC	Specialized ESIC publication	FSV
"Education & training" strategy implementation	Distribution of the dissemination strategy to educational centres together with teaching materials related.	Editorial Edelvives	FSV



LIFE12ENV/ES/000222

#### **ANNEX I - BUDGET**

In the table below, detailed information on the budget associated to the different communication actions foreseen for the After-LIFE period, is indicated. A description (as far as possible) of the foreseen means for their implementation is also included.

Tasks	Responsible/s partner/s	Means - Estimated / foreseen costs
Update and maintenance of the project website	FPNCyL	320 € + VAT/year (for 5 years)
Articles/news in websites and newsletters of the partners	All partners	Own means (staff working time), 0€ additional
Dissemination via social networks - continuation	FPNCyL	Own means (staff working time), 0€ additional
Other dissemination and communication actions (seminars, papers, workshops, articles, dissemination of materials and results, translation of useful tools and materials developed, etc.)	FPNCyL	These will be carried out as part of the staff duties, integrated in the general Budget. For seminars, workshops and other dissemination activities, an additional Budget is foreseen: 1.000€/year
Every after-LIFE activity to be carried out by FSV will be taken out of own resources as part of its CSR and its environmental policy.	FSV	These will be carried out as part of the staff duties, integrated in the general Budget with a specific budgetary allocation of 3.000€/year.
Every after-LIFE activity to be carried out by Ayto. Logroño FSV will be taken out of own resource of the involved departments.	Ayto. Logroño	These will be carried out as part of the staff duties, integrated in the general Budget with a specific budgetary allocation of 1.000€/year.

#### ANNEX II – Abbreviations used

The table below shows all main abbreviations and acronyms used along this document.

Abbreviation/ acronym	Meaning
AETICAL	Cyl Federation of ICT companies
Ayto. Logroño	Ayuntamiento de Logroño (associated beneficiary of LIFE Green TIC project)
CyL	Castilla y León
CO <sub>2</sub>	Carbon dioxide
CONETIC	Spanish Federation of ICT companies
CONAMA	Spanish National Environmental Congress
ECLAP	Public Administration School of Castilla y León
ESIC	Business Marketing School
EU	European Union
ENERTIC	Plataforma de empresas TIC para la mejora de la eficiencia energética
FPNCyL	Fundación Patrimonio Natural de Castilla y León (coordinating beneficiary)
FSC	Forest Stewardship Council (sustainable forestry)
FSV	Fundación San Valero (associated beneficiary of LIFE Green TIC project)
ICCRAM	International Days in Critical Raw Materials (Congreso)
ICT / IT	Information and communication technologies / Information technologies
PRAE	Propuestas ambientales educativas (headquarters of FPNCyL)
t	tonne
UVA	University of Valladolid