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|---|------------------------|---------------------|----|-----------------------|
| Part A. PERSONAL INFORMATION | | CV date | | October 29 th 2018 |
| First and Family name | María Teresa Sanz Díaz | | | |
| Social Security, Passport, ID number | 48814740T | Age | 40 | |
| Researcher numbers | Researcher ID | F-4282-2017 | | |
| | Orcid code | 0000-0002-2403-8447 | | |

A.1. Current position

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|-----------------------------------|---|--------|--|--|
| Name of University/Institution | UNIVERSIDAD DE SEVILLA | | | |
| Department | ECONOMIC ANALYSIS AND POLITICAL ECONOMY | | | |
| Address and Country | AVDA. RAMÓN Y CAJAL,1. SPAIN | | | |
| Phone number | +34954557524 | E-mail | mtsanz@us.es | |
| Current position | CONTRATADO DOCTOR | From | 14/06/2018 | |
| Espec. cód. UNESCO | 530803, 530715, 531205, 530202 | | | |
| Key words | ENERGY EFFICIENCY, RENEWABLE ENERGY, DEA, ENVIRONMENTAL EFFICIENCY | | | |

A.2. Education

| PhD | University | Year |
|---------|------------------------|------|
| ECONOMY | UNIVERSIDAD DE SEVILLA | 2007 |
| | | |

A.3. JCR articles, h Index, thesis supervised...

Sexenio: granted in July 2018
 Total articles in publications list (ISI): 11
 Sum of the times cited (Web of Science): 28; Google scholar (80)
 Average citations per article: 2.33
 Total publications in the first quartile (Q1): 5
 H - index (WOS): 4

Part B. CV SUMMARY (max. 3500 characters, including spaces)

María Teresa Sanz Díaz graduate in Economy at Universidad de Sevilla (US) in 2000. In 2007, she got the PhD in Economy in the same University. Her thesis obtained the grade of *Sobresaliente cum Laude por unanimidad*.

She is Profesora Contratada Doctora (since 2018), teaching in studies of Degree and Master. She started her work in Universidad de Sevilla with an investigation grant (FPDI of Junta de Andalucía) in 2002. For 2007 to 2009, she worked at Universidad de Huelva as Profesora Ayudante.

Since 2009, she has been working at Universidad de Sevilla, first as Profesora Ayudante and in 2014 was accredited as Profesora Ayudante Doctor and Contratada Doctor. Later, in 2018, she has been accredited to the figure of *Titular de Universidad* (ANECA). Her teaching is linked to Microeconomic and History Economic Thought subjects. In this scope she has a teaching book, some innovation teaching Project and three papers about the use of TICs at university education. These papers are indexed in JCR index, in the first quartile.

In the area of research, she is part of the investigation group of Economic Theory and Political Economy. Besides, she is researcher of the Chair of Economics of Energy and Environment at Universidad de Sevilla. Her scopes are energy efficiency, renewable energy political and environmental efficiency analyzed using DEA. She is co-author of eleven scientific articles

(JCR), five of them are situated in the first quartile. She also has four investigation articles published in reviews indexed in SCOPUS. She has published two chapter of books and also her doctoral thesis was published.

Nowadays, she is co-directing a doctoral thesis. This thesis has two articles indexed in JCR. Also, she has supervised six Degree Thesis and eight Master Thesis.

She has been a member of the research team of the project *Claves para Desacoplar Crecimiento y Emisiones de CO₂ en España*. Likewise, she has participated in two other national and international research projects. One in 2014 funded by the European Commission (Joint Research Center) and another, during the stay in Huelva, belonging to the INTERREG Community Initiative (UE).

Finally, she has presented communications at different international and national conferences on the Environment and Energy, I-O Tables and History of Economic Thought.

She is evaluator of some national and international reviews as Utilities Policy, Transportation research part D: Transport and environment, Climate Policy, History of Economic Ideas, *Investigaciones de Historia Económica*, *Cuadernos de Economía* and *Estudios de Economía Aplicada*.

Part C. RELEVANT MERITS

C.1. Publications (including books)

1. Cansino, J., Sánchez-Braza, A., Sanz-Díaz, MT. 2018. Policy Instruments to Promote Electro-Mobility in the EU28: A Comprehensive Review. *Sustainability*, 10(7), 2507.
This paper analyses the policies of the different countries of the European Union to promote the electric vehicles, including subsidies, fiscal measures and adaptation of infrastructures.
2. Moreno-Moreno, JJ, Velasco-Morente, F, Sanz-Díaz, MT. 2018. Assessment of the operational and environmental efficiency of agriculture in Latin America and the Caribbean. *Agricultural Economics (Zemедełská ekonomika)*, 64(2), 74-88.
This article evaluates the environmental efficiency of the agricultural sector in the countries of Latin America and the Caribbean, using a DEA methodology.
3. Moreno-Moreno, JJ, Velasco-Morente, F, Sanz-Díaz, MT. 2017. A DEA-based evaluation of Latin America and the Caribbean agricultural environmental performance under the assumption of natural and managerial efficiency. *Revista de Economía Mundial*, 47, 157-178.
This paper analyses the managerial efficiency, from the environmental point of view, as well as the types of returns to scale of agriculture in the countries of Latin America and the Caribbean, for the year 2012.
4. Castillo-Manzano, JI, Castro-Nuño, M, López-Valpuesta, L, Sanz-Díaz, MT, Yñiguez Ovando, R,. 2017. To take or not to take the laptop or tablet to classes, that is the question. *Computers in Human Behavior* 68, 326-333.
This article describes the profile of university students in the Degree of Administration and Management, on the use of portable devices, both tablets and computers.
5. Román-Collado, R, Sanz-Díaz, MT, 2017. Analysis of energy end-use efficiency policy in Spain. *Energy Policy*, 101, 436-446.
This article belongs to the line of research in Energy Economics and the Environment. It is also linked to the Project I+D+i "Claves para Desacoplar Crecimiento y Emisiones de CO₂ en España". The article analyzes the Efficiency and Energy Saving Action Plan of Spain (2008-2012), a basic aspect for the aforementioned project, since the measures put into practice by the Spanish administration have been analyzed, differentiating those that have had a better result and impact on energy saving in Spain, of those that have been poorest from the point of view of energy efficiency. When determining which measures have had a greater impact on the improvement of energy efficiency, it is possible to identify which measures are the most appropriate to guide the Spanish economy towards the decoupling between emissions and economic growth.

6. Sanz-Díaz, MT, Velasco-Morente, F, Yñiguez Ovando, R., Díaz-Calleja, E. 2017. An analysis of Spain's global and environmental efficiency from a European Union perspective. *Energy Policy* 104, 183-193.).
This article belongs to the line of research in Energy Economics and the Environment. It is linked to the Project I+D+i "Claves para Desacoplar Crecimiento y Emisiones de CO₂ en España". The article supposes a significant advance in the existing bibliography since at the date of publication the position that Spain occupies within its economic environment of the EU-28, from the point of view of environmental efficiency, had not been analyzed. The methodology used is a DEA, supported by an econometric analysis, from which relevant results were extracted on the evolution of environmental efficiency in Spain, compared with the EU-28.
7. Sanz-Díaz, MT, Yñiguez Ovando, R, Rueda-Cantuche, JM, 2016. The relevance of multi-country input-output tables in measuring emissions trade balance of countries: the case of Spain. *SORT-Statistics and Operations Research Transactions* 40(1), 3-30. This article belongs to the line of research in Energy Economics and the Environment. It is linked to the Project I+D+i "Claves para Desacoplar Crecimiento y Emisiones de CO₂ en España".
This paper analyses the balance of emissions in Spain, based on an analysis of the carbon footprint in this country. The methodology is a multiregional input-output analysis, using the WIOD database, disaggregated by country.
8. Castillo-Manzano, JI, Castro-Nuño, M, Sanz-Díaz, MT, Yñiguez Ovando, R. 2016. Does pressing a button make it easier to pass an exam? Evaluating the effectiveness of interactive technologies in higher education. *British Journal of Educational Technology* 47, 710-720.
This paper analyses the effects on academic performance of the use of interactive response controls, to assess whether this high investment is necessary or not.
9. Castillo-Manzano, JI, Castro-Nuño, M, López-Valpuesta, L, Sanz-Díaz, MT, Yñiguez Ovando, R.,. 2016. Measuring the effect of ARS on academic performance: A global meta-analysis. *Computers & Education* 96, 109-121.
This paper studies all the published works on the effects of interactive response controls on academic performance. These works have to be adequate and have the quality and parameters necessary to be considered as items by the meta-analysis technique.
10. Sanz-Díaz, MT; Cansino-Muñoz Repiso, JM; González-Limón, JM; Santamaría, M; Yñiguez, R. 2014. Economic assessment of CO₂ emissions savings in Spain associated with the use of biofuels for the transport sector in 2010. *Utilities Policy*, 29, 25-32.
This work calculates the savings that Spain has to meet for the European biofuel objectives and the possible effects that this measure can have in the Spanish emissions.

C.2. Research projects and grants

1. *Claves para Desacoplar Crecimiento y Emisiones de CO₂ en España*. ECO2014-56399-R, Financing Organization: Ministerio de Economía y Competitividad. Responsibles: Cansino-Muñoz-Repiso, José Manuel y Pablo-Romero, MP.
Duration: 2015- 2018.
Amount (EUROS): 25.410.
Rol: researcher.
2. Time series of supply-use tables for Europe in base rev.2, current and previous year prices (1995-2009), IPTS-2012-18-j05-rc-ami, internacional. Financing Organization: European Commission - Joint Research Center.
Responsible: Raul Brey Sanchez.
Start date: 01/01/2014- End date: 3/11/2014.
Amount (EUROS): 99.000.
Rol: researcher.



3. ENERGY21-EIE/06/227/SI2.446794. Financing Organization: *Programa de Iniciativa Comunitaria INTERREG*.

Responsible: María de la O Barroso.

Start date: 01/03/2008- End date: 31/07/2009.

Amount (EUROS): 20.000.

Rol: researcher.

C.3. Contracts

1. Name: Cátedra de Economía de la Energía y del Medio Ambiente

Código: 1394/0103

Responsible: Cansino-Muñoz-Repiso, Jose Manuel

Start date: 02/01/2012 – End date: 01/01/2017

Amount (EUROS): 60.000

Rol: researcher.