

# Energy Technology Data Exchange: (ETDE)

*Its Relevance to Russian Federation's Energy  
Research & Technology Interests*

Moscow, Russia

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## Outline

# Energy Technology Data Exchange

- Who we are – background, mission, vision, membership
- Our main product: *ETDEWEB*
- Recent and Near-Term Enhancements: Access, Comprehensiveness, Speed
- What's in it for Russia – why join ETDE?
- External recognition of ETDE's value – “What people say about us”
- What would be required of Russia: Task- and Cost-sharing obligations
- Questions/Feedback

## ETDE's History

- Formed in 1987 as a multilateral energy research, technology and development (RTD) information exchange agreement, replacing numerous bilateral agreements.
- Initially, 11 founding member countries; currently, 16 member countries plus “partners.”
- A “cross-sectional” Implementing Agreement – holding benefit/relevance to all energy technology subtopics.

## ETDE's Mission and Vision

- *To provide governments, industry, and the research community in the member countries with access to the widest range of information on energy research, technology, and development (RTD) and to increase dissemination of this information to developing countries.*
- *Vision: "The first place the world thinks of when it needs key information to answer energy RTD questions."*

# Current ETDE Member Countries



**Brazil**



**Canada**



**Denmark**



**Finland**



**Germany**



**Korea, Rep. of**



**Mexico**



**The Netherlands**



**Norway**



**Portugal**



**Spain**



**Sweden**



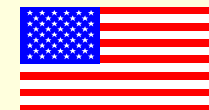
**South Africa\***



**Switzerland**



**United Kingdom**



**United States**

\*Awaiting Cabinet Approval

## ETDE's Product: *ETDEWEB*

[www.etde.org/etdeweb](http://www.etde.org/etdeweb)

- 4.03 million citations
- 210,000 have electronic full text available for direct downloading from ETDE site
- 756,000 have Digital Object Identifier (DOI) links to publishers where document can be viewed/purchased
- Many hundreds of thousands more have hyperlinks to documents residing throughout the world

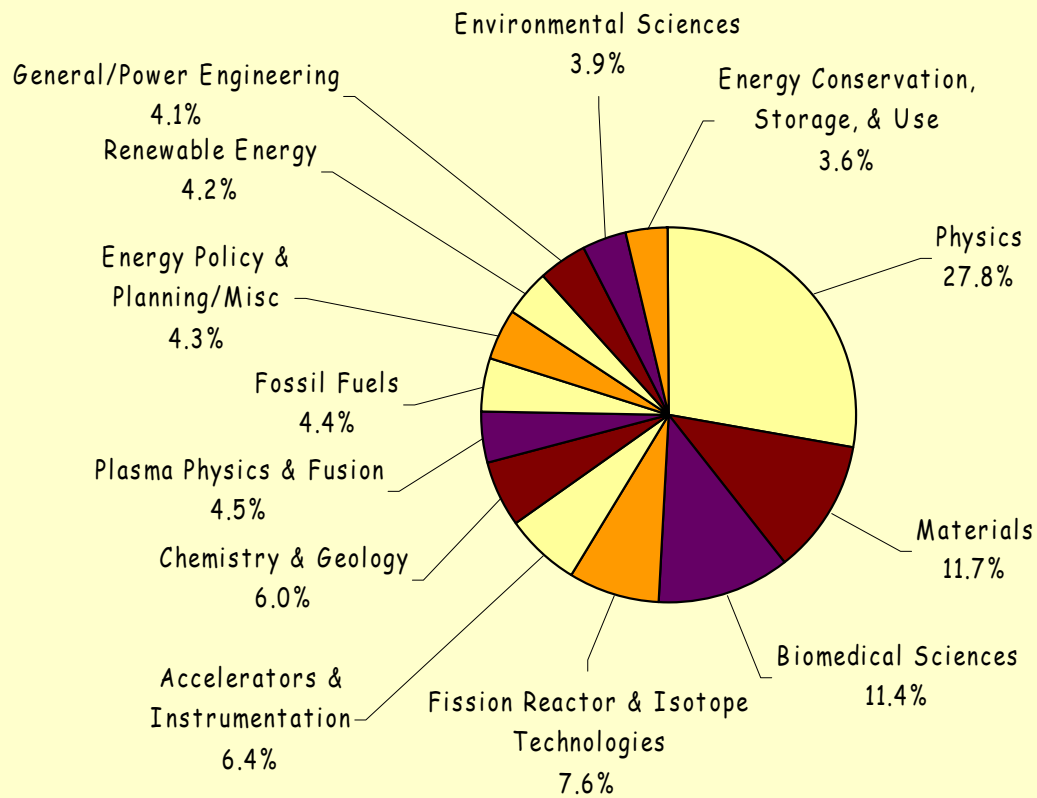
# Input by Country/Source, 2003-2007

<b>Database entries received and disseminated 2003-2007</b>			
<b>Brazil</b>	<b>13,825</b>	<b>Korea</b>	<b>17,413</b>
<b>Canada</b>	<b>19,170</b>	<b>Mexico</b>	<b>2,589</b>
<b>Denmark</b>	<b>2,182</b>	<b>Netherlands</b>	<b>101,195</b>
<b>Finland</b>	<b>2,425</b>	<b>Norway</b>	<b>2,896</b>
<b>France</b>	<b>25,196</b>	<b>Portugal (joined in 2005)</b>	<b>191</b>
<b>GCC Coverage *</b>	<b>955</b>	<b>Spain</b>	<b>2,886</b>
<b>Germany</b>	<b>72,328</b>	<b>Sweden</b>	<b>4,932</b>
<b>IEA CCC*</b>	<b>4,710</b>	<b>Switzerland</b>	<b>5,762</b>
<b>INIS*</b>	<b>172,853</b>	<b>United Kingdom</b>	<b>82,762</b>
<b>Italy (non-nuclear thru 2004)</b>	<b>911</b>	<b>United States</b>	<b>173,248</b>
<b>Japan (non-nuclear thru 2003)</b>	<b>5,393</b>		

\*From Non-ETDE members

# Subject Areas, 2003-2007

Input by Subject Scope (713,822 records): 2003 - 2007



## Easy Search

Search For:   
Sort By:   
Sort Order:  Ascending  Descending

The Easy Search is the simplest way for you to search the full bibliographic records available in ETDEWEB with various sort options. Type your search term (or search phrase in quotes), then choose the sort options by clicking on your preference. Click on the "Search" button to start the search. For additional information and tips, click on [Help](#).



## Search Results

Search term(s): [Bibliographic Data and Full Text Contains \(biofuels or biodiesel\)](#)

Sorted by: [publication\\_date \(Descending\)](#)

Results: [1-25 of approximately 5,095 matches. Show Exact Count](#)

Show: [Make a Selection](#) [Go](#)

Current Page: 1 of 204 [Next >](#) Go to Page: [1](#) [Go](#)

**Access to full-text**

[only \(✓\) Items](#) [\(✓\) all Items on This Page](#) [Clear all \(✓\) Items](#) [Create Alert](#) [Printer-friendly Version](#) [Refine Search](#)

Size	Title	Author (s)	Pub Date	Identifying Numbers
	<a href="#">Renewable Energy Technology Opportunities: Responding to Global Energy Challenges (Presentation)</a>	<a href="#">Arvizu, D.</a>	2007 Jan 23	NREL/PR-100-41107 OSTI ID: 898136 AC36-99-GO10337
<input type="checkbox"/>	<a href="#">Flow properties of biodiesel fuel blends at low temperatures</a>	<a href="#">Rushang M. Joshi; Michael J. Pegg</a> [Dalhousie University, Halifax, NS (Canada). Department of Process Engineering and Applied Science]	2007 Jan 15	OSTI ID: 20823854 Journal ID: ISSN 0016-2361; FUELAC; TRN: 000100134
<input type="checkbox"/>	<a href="#">Effects of emulsification variables on fuel properties of two- and three-phase biodiesel emulsions</a>	<a href="#">Cherng-Yuan Lin; Shiou-An Lin</a> [National Taiwan Ocean University, Keelung (Taiwan). Department of Marine Engineering]	2007 Jan 15	OSTI ID: 20823861 Journal ID: ISSN 0016-2361; FUELAC; TRN: 000100141
<input type="checkbox"/>	<a href="#">Influence of particle size on the analytical and chemical properties of two energy crops</a>	<a href="#">T.G. Bridgeman; L.I. Darvell; J.M. Jones; P.T. Williams; R. Fahmi; A.V. Bridgwater; T. Barraclough; I. Shield; N. Yates; S.C. Thain; I.S. Donnison</a> [University of Leeds, Leeds (United Kingdom). Energy and Resources Research Institute, School of Process, Environmental and Materials Engineering]	2007 Jan 15	OSTI ID: 20823957 Journal ID: ISSN 0016-2361; FUELAC; TRN: 000100286
<input type="checkbox"/>	<a href="#">National Bioenergy Center Biochemical Platform Integration Project. Quarterly Update #13, October-December 2006</a>	<a href="#">Schell, D. J.</a>	2007 Jan 01	DOE/GO-102007-2094 OSTI ID: 898135 AC36-99-GO10337
<input type="checkbox"/>	<a href="#">IDAHO BIODIESEL INFRASTRUCTURE PROJECT DOE'S INITIATIVE ON COOPERATIVE PROGRAMS WITH STATES FOR RESEARCH, DEVELOPMENT</a>	<a href="#">JOHN CROCKETT</a>	2006 Dec 31	1 OSTI ID: 896914 FC36-02GO12021

## Search Results

Example 2: "electric cars"


Search term(s): Any Field Contains ("electric cars")

Sorted by: publication\_date (Descending)

Results: 1–25 of approximately 570 matches. [Show Exact Count](#)

Show:

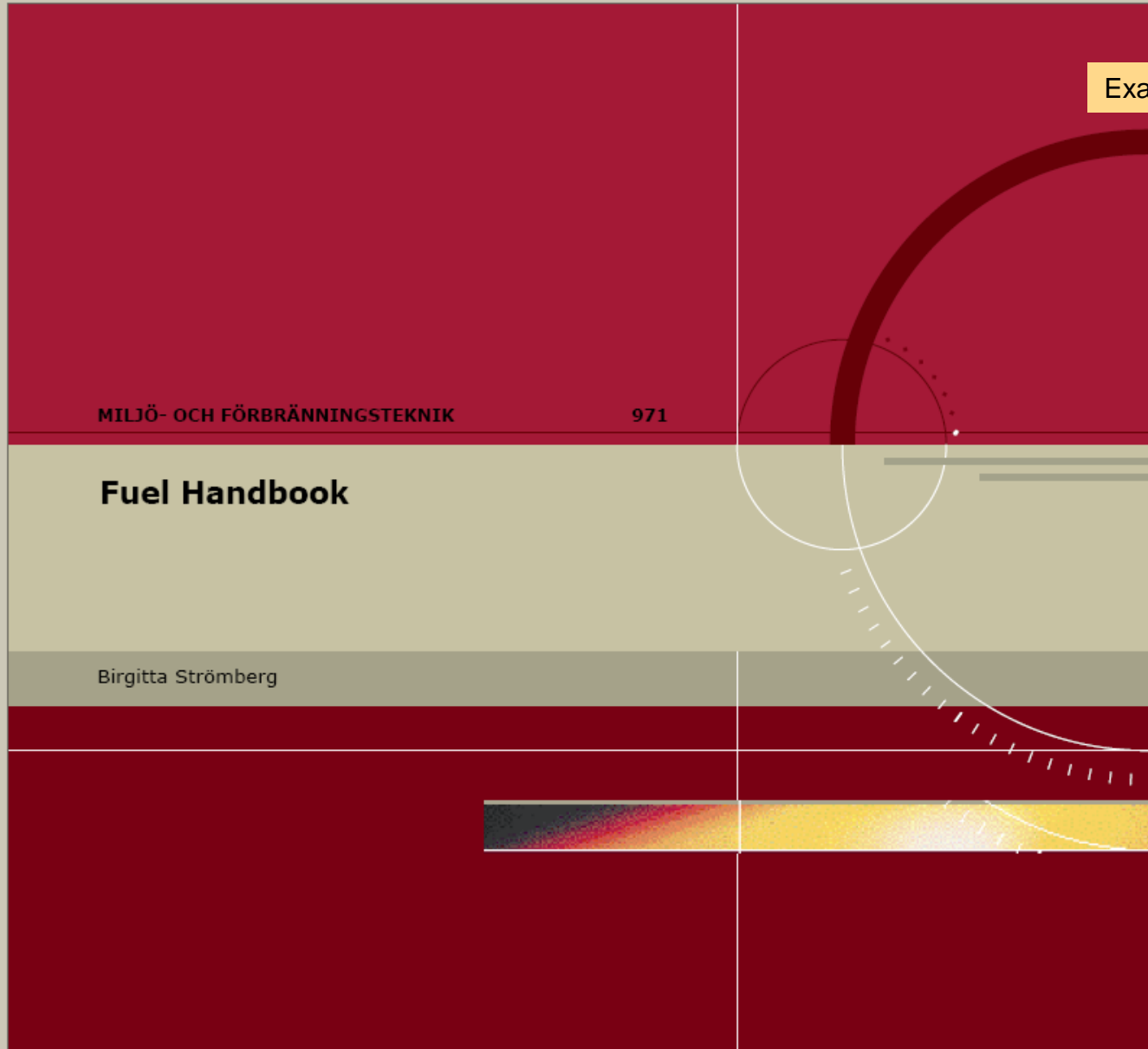
« Previous Current Page: 1 of 23 [Next »](#) Go to Page:

<a href="#">Show only (v) Items</a>	<a href="#">(v) all Items on This Page</a>	<a href="#">Clear all (v) Items</a>	<a href="#">Create Alert</a>	<a href="#">Printer-friendly Version</a>	<a href="#">Refine Search</a>
Size	Title	Author (s)	Pub Date		
<input type="checkbox"/>  585 K	<a href="#">Danish greenhouse gas reduction scenarios for 2020 and 2050</a>	<a href="#">Karlsson, K.</a> ; <a href="#">Joergensen, Kaj</a> (Risoe DTU, Roskilde (DK)); <a href="#">Werling, J.</a> ; <a href="#">OErsted Pedersen, H.</a> ; <a href="#">Kofoed-Wiuff, A.</a> (Ea energy Analysis, Copenhagen (DK))	2008 Feb 15		
<input type="checkbox"/>  8 Mb	<a href="#">Comparative assessment of hydrogen storage and international electricity trade for a Danish energy system with wind power and hydrogen/fuel cell technologies. Final project report</a>	<a href="#">Soerensen, Bent</a> (Roskilde University, Energy, Environment and Climate Group, Dept. of Environmental, Social and Spatial Change (ENSPAC) (DK)); <a href="#">Meibom, P.</a> ; <a href="#">Nielsen, Lars Henrik</a> ; <a href="#">Karlsson, K.</a> (Technical Univ. of Denmark, Risoe National Laboratory for Sustainable Energy, Systems Analysis Dept., Roskilde (DK)); <a href="#">Hauge Pedersen, A.</a> (DONG Energy, Copenhagen (DK)); <a href="#">Lindboe, H.H.</a> ; <a href="#">Bregnebaek, L.</a> (ea Energy Analysis, Copenhagen (DK))	2008 Feb 15		
<input type="checkbox"/>	<b>Electric cars</b> as current buffers: Strompuffer Elektroauto	<a href="#">Frey, M.</a>	2008 Jan 02		
<input type="checkbox"/> 	<a href="#">Renewable Energy Community: Key Elements</a>	<a href="#">Carlisle, N.</a> ; <a href="#">Elling, J.</a> ; <a href="#">Penney, T.</a>	2008 Jan 01		
<input type="checkbox"/>  834 K	<a href="#">Environmental Energy Technologies Division Newsletter, Fall 2007, Vol. 4, No. 4)</a>	<a href="#">Chen, Allan</a> (Editor)	2007 Dec 14		
<input type="checkbox"/>  980 K	<a href="#">Global Assessment of Hydrogen Technologies – Task 5 Report Use of Fuel Cell Technology in Electric Power Generation</a>	<a href="#">Fouad, Fouad H.</a> ; <a href="#">Peters, Robert W.</a> ; <a href="#">Sisiopiku, Virginia P.</a> ; <a href="#">Sullivan Andrew J.</a> ; <a href="#">Ahluwalia, Rajesh K.</a>	2007 Dec 01		
<input type="checkbox"/>  2 Mb	<a href="#">Risoe energy report 6. Future options for energy technologies</a>	<a href="#">Larsen, Hans</a> ; <a href="#">Soenderberg Petersen, L.</a> (eds.)	2007 Nov 15		
<input type="checkbox"/>	<a href="#">Millions of battery stores: Millionen kleine Speicher</a>	<a href="#">Weinhold, N.</a>	2007 Jul 15		
<input type="checkbox"/>	<a href="#">Lead-acid and Lithium-ion batteries for electric bikes in China: Implications on the future growth of electric-drive vehicles</a>	<a href="#">Weinert, Jonathan X.</a> ; <a href="#">Burke, Andrew F.</a> [Inst. of Transportation Studies Univ. of California, Davis (United States)]	2007 Jul 01		
<input type="checkbox"/>  13 Mb	<a href="#">First international congress on plant oil fuels. Proceedings: Erster Internationaler Kongress zu Pflanzenoel-Kraftstoffen. Tagungsband</a>	Not Available	2007 Jul 01		
<input type="checkbox"/>  8 Mb	<a href="#">Energy solutions for sustainable development. Proceedings</a>	<a href="#">Soenderberg Petersen, L.</a> ; <a href="#">Larsen, Hans</a> (eds.)	2007 May 15		
<input type="checkbox"/> 	<a href="#">Fuel cell or battery: <b>electric cars</b> are the future</a>	<a href="#">Van Mierlo, J.</a> [Vrije Universiteit Brussel, Department of Electrical Engineering and Energy Technology (ETEC), Pleinlaan 2, BE-1050 Brussels (Belgium)]; <a href="#">Maggetto, G.</a> [AVERE, European Association for Battery, Hybrid and Fuel Cell Electric Vehicles,	2007 Apr 15		

Pages

Attachments

Comments



# Recent and Near-Term Enhancements

## ➤ Access

- *Domain recognition – allows access without password*
- *Google indexing of partial records – pulls web traffic to ETDE's "door"*
- *Searched by WorldWideScience.org*

## ➤ Comprehensiveness

- *Distributed searching of >150 million pages of R&D literature from other sources (e.g., CORDIS, Esp@cenet, Science.gov)*
- *Partnerships: INIS, Clean Coal Centre*
- *Elsevier Project*

## ➤ Speed

- *New technical platform delivers search results in seconds.*

## What's In It for the Russian Federation?

- Nationwide access to world's largest energy research, technology, and development information collection
- Avoiding duplication of research effort and learning from expected and unexpected results.
- Jump-starting research at a point further along than anticipated.
- Staying abreast of recent developments in various research areas (including some basic sciences).
- Identifying which countries and people are involved in particular research areas.
- Understanding how countries deal with energy-related environmental and climate change issues.
- Contracting party has right to determine ETDEWEB access within its national borders.

# External Recognition of Value

## “What people say about us”

- “*ETDEWEB* [the ETDE database] is clearly the information system of reference; many national websites on energy research, technology, and development link to *ETDEWEB*.” European Commission Report, 2005
- 2007 Mexico user survey asking respondents about their perceptions of the impact of information gathered from *ETDEWEB*:
  - *Information can be found that other websites don't have. (7 different respondents)*
  - *I have been able to speed up my research, because of *ETDEWEB* information.*
  - *It helps to find experts as well as institutions.*
  - *Due to the existence of this database, people wanting access to specific information save not only their money, but also their time.*
- “With so much invested in energy research, ETDE provides that last crucial link bringing those research dollars to fruition by communicating research results easily and efficiently. For the public-sector research sponsors interested in making the most of their research investments, participating in ETDE is a critical link in the technical communications system that helps turn research into valuable implemented technology.” U.S. *ETDEWEB* user, 2007

## What Would Be Required of Russian Federation – Obligations: Task- and Cost-Sharing

- Task-sharing: prepare and submit records of energy RTD activities published within the member country (from journals, technical reports, conference proceedings, books, etc.), including full text when available.
- Cost-sharing: make contribution to cover annual cost of the exchange (i.e., primarily, ETDEWEB), consisting of “base” fee and “additional” contribution.

## Conclusions/Questions

- ETDE welcomes and encourages Russian Federation membership.
- ETDE appreciates the IEA's NEET initiative for enabling dialogue and cooperation.

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