

# STANDARDISATION OF SRF (ISO/TC 300)



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Workshop "Production and utilisation options for Solid Recovered Fuels"

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# SRF STANDARDISATION: EXTENTION TO GLOBAL SURROUNDING (ISO)



- A new Technical Committee was approved in two ISO votings in Oct/Nov 2015; consequently a new "ISO/TC 300 Solid recovered fuels" was established in November 2015
- "Participating" countries (17 as of May 13, 2018) (P-members): Austria, Belgium, China, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Republic of Korea, Netherlands, Pakistan, Serbia, Spain, Sweden, United Kingdom; in addition 17 O-members (observing) (Brazil, Czech Republic, Egypt, Hungary, Islamic Republic of Iran, Israel, Poland, Romania, Saudi Arabia, Singapore, Slovakia, South Africa, Switzerland, Thailand, United States, Viet Nam, Zambia
- Secretariat and chairmanship: Finland (SFS)
- Work programme will be carried out using so called Vienna Agreement with CEN/TC 343 Solid recovered fuels, with preference of ISO Lead

## ISO/TC 300: SCOPE



- Scope: “Standardization of solid recovered fuels, from point of acceptance of material to be recovered to point of delivery, prepared from non-hazardous waste to be used for energy purposes, excluding fuels that are included in the scope of ISO/TC 238 and ISO/TC 28”

# MOTIFS TO MAKE COMMON STANDARDS FOR SRF



- To simplify communication between fuel suppliers and customers
- To assure that heating equipment and solid recovered fuels are designed for each other
- To provide the market with tools to determine economic value of delivered fuels
- To produce a common way to control and regulate safety demands

# ISO/TC 300: STRUCTURE

- Secretariat and chairmanship in Finland (SFS) (Ms. Eija Mäkinen, Mr. Mikko Talola)
- Six working groups (WGs 1-5 are same as in CEN/TC 343, WG 6 is new)
- :
  - WG1 "Terminology and quality assurance", convenor Mr. Gideon Richards, UK
  - WG 2 "Specification and classes", convenor Mr. Inge Johansson
  - WG 3 "Sampling and sample reduction", convenor Mr. Jaap Hooijmans, The Netherlands
  - WG 4 " Physical and mechanical tests", convenor Mr. Jörg Maier, Germany
  - WG 5 "Chemical tests and determination of biomass content", convenor Mr. Giovanni Ciceri, Italy
  - WG 6 "Safety of solid recovered fuels", convenor Mr. Anders Lönnermark, Sweden
- Liaisons: ECOS, ERFO, CEMBUREAU, ISO/TC 238

# ISO/TC 300 WORK PROGRAM



- All CEN/TC 343 deliverables (34 items) were listed as preliminary work items (PWI) of ISO/TC 300; in addition there are four AWIs which have no corresponding CEN document (marked with “x” in following list)
- Approved work items (AWI) so far are (14 items as of February 2018):
  - ISO/AWI 21637: Solid recovered fuels – Terminology, definitions and descriptions
  - ISO/CD 21640: Solid recovered fuels -- Specifications and classes
  - ISO/AWI 21644: Solid recovered fuels – Method for the determination of biomass content
  - ISO/AWI 21645: Solid recovered fuels – Methods for sampling
  - ISO/CD 21654: Solid recovered fuels – Determination of calorific value
  - ISO/CD 21656: Solid recovered fuels – Method for the determination of ash content
  - ISO/CD 21660-3: Solid recovered fuels – Determination of moisture content using the oven dry method – Part 3: Moisture in general analysis sample

## ISO/TC 300 WORK PROGRAM (CONT.)

- ISO/AWI 21663: Solid recovered fuels – Methods for the determination of carbon (C), hydrogen (H), nitrogen (N) and sulphur (S) by the instrumental method
- ISO/AWI 21911 (x): Solid recovered fuels – Determination of self-heating
- ISO/AWI 21912 (x): Solid recovered fuels -- Safe handling and storage of solid recovered fuels
- ISO/AWI TR 21916 (x): Solid recovered fuels -- Guidance for specification of solid recovered fuels (SRF) for selected uses
- ISO/AWI 22105 (x): Solid recovered fuels -- Determination of the total Sulphur content using a high temperature tube furnace combustion method -- IR-detection
- ISO/CD 22167: Solid recovered fuels – Determination of content of volatile matter
- ISO/AWI TS 22940: Solid recovered fuels – Determination of elemental composition by X-ray fluorescence

## MEETINGS/PARTICIPATION



- First ISO/TC 300 (plenary) meeting in April, 2016, in Helsinki, Finland, the second in November 2016 in Tokyo, Japan, the third in September 2017 in Stockholm, Sweden, the fourth (meeting week) in September 24-28, 2018, in Florence, Italy
- Working group meetings also by webex (internet)
- Participation to TC meeting and working group meetings through national standard bodies
- Participation possible in most countries also through "mirror groups"
- Participation from outside Europe wished/should be encouraged



# CONCLUSIONS



- Work has started well: six working groups have been established and started their work actively
- Participation from outside Europe so far low; interest and participation should be greater
- Challenges in global SRF standardization context relate mostly to differences in regulatory environment (including e.g. terms)
- SRF standardization - started in Europe - will be smoothly extended to global ISO surrounding
- → resulting globally more known, well-established waste management and utilization concept