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Tender

## **Power to Sustainable Fuel Pilot Plant**

UNIVERSITY OF SHEFFIELD

F02: Contract notice

Notice identifier: 2022/S 000-025621

Procurement identifier (OCID): ocds-h6vhtk-0367f6

Published 13 September 2022, 11:36am

### **Section I: Contracting authority**

#### **I.1) Name and addresses**

UNIVERSITY OF SHEFFIELD

Western Bank

SHEFFIELD

S102TN

#### **Contact**

David Middle

#### **Email**

[dave.middle@sheffield.ac.uk](mailto:dave.middle@sheffield.ac.uk)

#### **Telephone**

+44 1142221560

#### **Country**

United Kingdom

**Region code**

UKE32 - Sheffield

**Charity Commission (England and Wales)**

University of Sheffield

**Internet address(es)**

Main address

<https://www.sheffield.ac.uk/>

**I.3) Communication**

The procurement documents are available for unrestricted and full direct access, free of charge, at

<https://intendhost.co.uk/sheffield.aspx/Home>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://intendhost.co.uk/sheffield.aspx/Home>

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Education

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## **Section II: Object**

### **II.1) Scope of the procurement**

#### **II.1.1) Title**

Power to Sustainable Fuel Pilot Plant

Reference number

3495/DM/22

#### **II.1.2) Main CPV code**

- 09000000 - Petroleum products, fuel, electricity and other sources of energy

#### **II.1.3) Type of contract**

Supplies

#### **II.1.4) Short description**

The University of Sheffield's Translational Energy Research Centre (TERC) is one of the largest and bestequipped national R&D centres in Europe for zero-carbon energy, hydrogen, bioenergy, and Carbon Capture, Utilisation and Storage (CCUS). We are looking to procure a sustainable aviation fuel (SAF) pilot plant based on Fischer-Tropsch technology.

The SAF plant is required to produce 1.5+ L/h of sustainable aviation fuel to Jet A1 ASTM specification D1655 (with flash point of 38+ °C and a freeze point maximum of -47°C). The plant shall utilise onsite CO<sub>2</sub> (minimum 2 / 8 as an industrial gas, but preferably CO<sub>2</sub> captured onsite from bioenergy exhaust gases) and on-site generated green H<sub>2</sub> as feedstocks. It shall also have the option to use biomass syngas from an onsite wood gasifier.

This tender is made up of 4 distinct lots, comprising of 6 individual modules:

#### **II.1.5) Estimated total value**

Value excluding VAT: £2,095,000

#### **II.1.6) Information about lots**

This contract is divided into lots: Yes

Tenders may be submitted for all lots

Maximum number of lots that may be awarded to one tenderer: 4

## **II.2) Description**

### **II.2.1) Title**

Lot 1 (x 3 modules)

Lot No

1

### **II.2.2) Additional CPV code(s)**

- 38970000 - Research, testing and scientific technical simulator
- 73000000 - Research and development services and related consultancy services

### **II.2.3) Place of performance**

NUTS codes

- UKE32 - Sheffield

Main site or place of performance

Translational Energy Research Centre at the University of Sheffield

### **II.2.4) Description of the procurement**

The University of Sheffield's Translational Energy Research Centre (TERC) is one of the largest and bestequipped national R&D centres in Europe for zero-carbon energy, hydrogen, bioenergy, and Carbon Capture, Utilisation and Storage (CCUS). We are looking to procure a sustainable aviation fuel (SAF) pilot plant based on Fischer-Tropsch technology.

The SAF plant is required to produce 1.5+ L/h of sustainable aviation fuel to Jet A1 ASTM specification D1655 (with flash point of 38+ °C and a freeze point maximum of -47 °C). The plant shall utilise onsite CO<sub>2</sub> (minimum as an industrial gas, but preferably CO<sub>2</sub> captured onsite from bioenergy exhaust gases) and on-site generated green H<sub>2</sub> as feedstocks. It shall also have the option to use biomass syngas from an onsite wood gasifier.

This tender is made up of 4 distinct lots, comprising of 6 individual modules:

Lot 1

(Module) #1 Gas clean-up and conditioning module

#2 Reverse Water Gas Shift module

#3 FT mixing skid

Lot 2

#5 Hydrocracking and hydrogenation module

Lot 3

#6 Distillation module

Lot 4

#7 Site flare

#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

#### **II.2.6) Estimated value**

Value excluding VAT: £935,000

#### **II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Start date

1 November 2022

End date

31 May 2023

This contract is subject to renewal

No

#### **II.2.10) Information about variants**

Variants will be accepted: Yes

### **II.2.11) Information about options**

Options: Yes

Description of options

As described within the tender documents

## **II.2) Description**

### **II.2.1) Title**

Lot 2 - Hydrocracking and hydrogenation module

Lot No

2

### **II.2.2) Additional CPV code(s)**

- 38970000 - Research, testing and scientific technical simulator
- 73000000 - Research and development services and related consultancy services

### **II.2.3) Place of performance**

NUTS codes

- UKE32 - Sheffield

Main site or place of performance

Translational Energy Research Centre at the University of Sheffield

### **II.2.4) Description of the procurement**

The University of Sheffield's Translational Energy Research Centre (TERC) is one of the largest and bestequipped national R&D centres in Europe for zero-carbon energy, hydrogen, bioenergy, and Carbon Capture, Utilisation and Storage (CCUS). We are looking to procure a sustainable aviation fuel (SAF) pilot plant based on Fischer-Tropsch technology.

The SAF plant is required to produce 1.5+ L/h of sustainable aviation fuel to Jet A1 ASTM specification D1655 (with flash point of 38+ °C and a freeze point maximum of -47 °C).

The plant shall utilise onsite CO<sub>2</sub> (minimum 4 / 8 as an industrial gas, but preferably CO<sub>2</sub> captured onsite from bioenergy exhaust gases) and on-site generated green H<sub>2</sub> as feedstocks. It shall also have the option to use biomass syngas from an onsite wood gasifier.

This tender is made up of 4 distinct lots, comprising of 6 individual modules:

Lot 1

(Module) #1 Gas clean-up and conditioning module

#2 Reverse Water Gas Shift module

#3 FT mixing skid

Lot 2

#5 Hydrocracking and hydrogenation module

Lot 3

#6 Distillation module

Lot 4

#7 Site flare

#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

#### **II.2.6) Estimated value**

Value excluding VAT: £900,000

#### **II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Start date

1 November 2022

End date

31 May 2023

This contract is subject to renewal

No

### **II.2.10) Information about variants**

Variants will be accepted: Yes

### **II.2.11) Information about options**

Options: Yes

Description of options

As described within the tender documents

## **II.2) Description**

### **II.2.1) Title**

Lot 3 - Distillation module

Lot No

3

### **II.2.2) Additional CPV code(s)**

- 38970000 - Research, testing and scientific technical simulator
- 73000000 - Research and development services and related consultancy services

### **II.2.3) Place of performance**

NUTS codes

- UKE32 - Sheffield

Main site or place of performance

Translational Energy Research Centre at the University of Sheffield

### **II.2.4) Description of the procurement**

The University of Sheffield's Translational Energy Research Centre (TERC) is one of the largest and bestequipped national R&D centres in Europe for zero-carbon energy,

hydrogen, bioenergy, and Carbon Capture, Utilisation and Storage (CCUS). We are looking to procure a sustainable aviation fuel (SAF) pilot plant based on Fischer-Tropsch technology.

The SAF plant is required to produce 1.5+ L/h of sustainable aviation fuel to Jet A1 ASTM specification D1655 (with flash point of 38+ °C and a freeze point maximum of -47°C). The plant shall utilise onsite CO<sub>2</sub> (minimum as an industrial gas, but preferably CO<sub>2</sub> captured onsite from bioenergy exhaust gases) and on-site generated green H<sub>2</sub> as feedstocks. It shall also have the option to use biomass syngas from an onsite wood gasifier.

This tender is made up of 4 distinct lots, comprising of 6 individual modules:

Lot 1

(Module) #1 Gas clean-up and conditioning module

#2 Reverse Water Gas Shift module

#3 FT mixing skid

Lot 2

#5 Hydrocracking and hydrogenation module

Lot 3

#6 Distillation module

Lot 4

#7 Site flare

#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

#### **II.2.6) Estimated value**

Value excluding VAT: £180,000

#### **II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Start date

1 November 2022

End date

31 May 2023

This contract is subject to renewal

No

### **II.2.10) Information about variants**

Variants will be accepted: Yes

### **II.2.11) Information about options**

Options: Yes

Description of options

As described within the tender documents

## **II.2) Description**

### **II.2.1) Title**

Lot 4 - Site flare

Lot No

4

### **II.2.2) Additional CPV code(s)**

- 38970000 - Research, testing and scientific technical simulator
- 73000000 - Research and development services and related consultancy services

### **II.2.3) Place of performance**

NUTS codes

- UKE32 - Sheffield

Main site or place of performance

Translational Energy Research Centre at the University of Sheffield

#### **II.2.4) Description of the procurement**

The University of Sheffield's Translational Energy Research Centre (TERC) is one of the largest and bestequipped national R&D centres in Europe for zero-carbon energy, hydrogen, bioenergy, and Carbon Capture, Utilisation and Storage (CCUS). We are looking to procure a sustainable aviation fuel (SAF) pilot plant based on Fischer-Tropsch technology.

The SAF plant is required to produce 1.5+ L/h of sustainable aviation fuel to Jet A1 ASTM specification D1655 (with flash point of 38+ °C and a freeze point maximum of -47 °C). The plant shall utilise onsite CO<sub>2</sub> (minimum as an industrial gas, but preferably CO<sub>2</sub> captured onsite from bioenergy exhaust gases) and on-site generated green H<sub>2</sub> as feedstocks. It shall also have the option to use biomass syngas from an onsite wood gasifier.

This tender is made up of 4 distinct lots, comprising of 6 individual modules:

Lot 1

(Module) #1 Gas clean-up and conditioning module

#2 Reverse Water Gas Shift module

#3 FT mixing skid

Lot 2

#5 Hydrocracking and hydrogenation module

Lot 3

#6 Distillation module

Lot 4

#7 Site flare

#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

**II.2.6) Estimated value**

Value excluding VAT: £80,000

**II.2.7) Duration of the contract, framework agreement or dynamic purchasing system**

Start date

1 November 2022

End date

31 May 2023

This contract is subject to renewal

No

**II.2.10) Information about variants**

Variants will be accepted: Yes

**II.2.11) Information about options**

Options: Yes

Description of options

As described within the tender documents

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**Section III. Legal, economic, financial and technical information**

**III.1) Conditions for participation**

**III.1.2) Economic and financial standing**

Selection criteria as stated in the procurement documents

**III.1.3) Technical and professional ability**

Selection criteria as stated in the procurement documents

## **Section IV. Procedure**

### **IV.1) Description**

#### **IV.1.1) Type of procedure**

Open procedure

#### **IV.1.8) Information about the Government Procurement Agreement (GPA)**

The procurement is covered by the Government Procurement Agreement: Yes

### **IV.2) Administrative information**

#### **IV.2.2) Time limit for receipt of tenders or requests to participate**

Date

18 October 2022

Local time

5:00pm

#### **IV.2.4) Languages in which tenders or requests to participate may be submitted**

English

#### **IV.2.7) Conditions for opening of tenders**

Date

21 October 2022

Local time

12:00pm

Place

The University of Sheffield, Finance Department

## **Section VI. Complementary information**

### **VI.1) Information about recurrence**

This is a recurrent procurement: No

### **VI.2) Information about electronic workflows**

Electronic ordering will be used

Electronic invoicing will be accepted

Electronic payment will be used

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

The University of Sheffield

Sheffield

S10 2TN

Country

United Kingdom