

22 August 2012

# OUTSTANDING HÄGGÅN URANIUM RESOURCE EXPANDS TO 800 MILLION POUNDS

# **HIGHLIGHTS**

- ▶ Häggån inferred resource expanded to 800 million pounds U<sub>3</sub>O<sub>8</sub> at a grade of 160ppm
- ► Häggån Project now the second largest undeveloped uranium resources in the world
- ▶ additional exploration target\* of 440 to 840 million pounds U<sub>3</sub>O<sub>8</sub> defined, demonstrating potential for significant additional resource increases
- ▶ includes initial 60 million pounds U<sub>3</sub>O<sub>8</sub> Inferred Resource in the Marby permit
- estimate independently prepared by H&S Consultants
- ▶ Häggån includes substantial molybdenum, nickel & vanadium resources
- work continues on pre-feasibility study planning

\*This potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource.

Headquartered in Melbourne and listed on the ASX, Aura Energy (AEE) is an explorer and developer of uranium assets. The company has advanced uranium projects with large resources that are close to the surface in both Europe and Africa and also has a resource in Australia. Aura holds a total of 857 million pounds (388,729 tonnes) uranium in inferred resources. Its two main projects include: the Häggån Project located in Sweden's Alum Shale Province, one of the largest depositories of uranium in the world; and the highly prospective Reguibat Province in Mauritania. The company aims to create shareholder value by completing feasibility studies on these two projects.



Aura Energy Limited (ASX: AEE, "Aura") has achieved another milestone with the announcement of a significantly expanded resource for its Häggån Project in Sweden. Independent resource consultants, H&S Consultants (H&SC), have calculated an expansion in the resource from 630 to 800 million pounds. This resource, for the first time, includes mineralisation in the separate Marby permit.

The Häggån Project forms part of a large uranium field in Central Sweden. The uranium occurs with molybdenum, nickel, vanadium and zinc in black shales. The shales form a near-continuous sheet throughout the part of the project that Aura has drilled, with thicknesses ranging between 20 metres and more than 250 metres.

Managing Director of Aura Energy, Dr Bob Beeson commented, "This significant upgrade to the resource and the inclusion of the Marby permit shows that we were correct in our anticipation of a notable extension to Häggån.

"The project is now in the top two undeveloped global uranium resources and we can expect the resource base to increase again with future drilling."

#### **Updated Inferred Resources**

H&SC used all available drill hole data obtained by Aura since 2008 to estimate the resources at Häggån and Marby. The estimates at Häggån are based on 66 vertical diamond drill holes totalling 13,078 metres and those at Marby are based on 10 vertical diamond drill holes totalling 2,249 metres. Häggån has been drilled on a nominal 400 by 400 metre grid. The Marby mineralisation has been drilled on an irregular grid.

Based on all of the Häggån assay data collected to date, H&SC has established a total resource estimate for the deposit reported in accordance with the JORC (Joint Ore Reserves Committee) 2004 Code and Guidelines. H&SC has used the method of ordinary block kriging to estimate grade and tonnage and considers that the drilling density and assay quality is of a standard that qualifies the estimate as an Inferred Resource.

The total resource estimates for the Häggån and Marby permits are summarised in Table 1.

U <sub>3</sub> O <sub>8</sub> (100ppm	Tonnes	U <sub>3</sub> O <sub>8</sub>	Мо	V	Ni	Zn
Cutoff)	(Bt)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
Inferred	2.35	155	207	1,519	316	431

Table 1: Inferred Resources for the Häggån Project
(Bt = billion tonnes)

Significant figures quoted do not imply precision and are to minimise round-off errors.



Contained metal contents for the Inferred Resource for the results in Table 1 are provided in Table 2. Tonnage figures in the tables of resources have been rounded and the use of significant figures for grades and contained metal do not imply precision.

U₃O <sub>8</sub> (100ppm	U₃O <sub>8</sub>	Mo	V	Ni	Zn
Cutoff)	(Mlbs)	(Mlbs)	(Mlbs)	(Mlbs)	(Mlbs)
Inferred	800	1,070	7,860	1,640	

Table 2: Contained metal in Inferred Resources for the Häggån Project Significant figures quoted do not imply precision and are to minimise round-off errors.

Figure 1 below shows the location of the Häggån Project area (including Marby) and its location in Sweden.

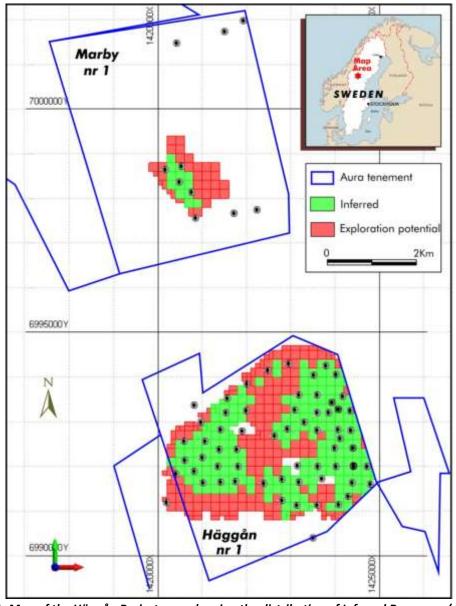


Fig. 1: Map of the Häggån Project area showing the distribution of Inferred Resources (green) and areas of Exploration Potential (red)



## **Exploration Target**

H&SC have also provided Aura with an Exploration Target based on completed drilling that is not of sufficient drill density to be included as Inferred Resources. This potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource.

This information provides the Company with an indication of the uranium potential in those areas that have experienced reconnaissance drilling. These results demonstrate the likelihood of considerable amounts of uranium and other metals that are within the project over and above the resource estimates given above.

These Exploration Targets are extremely encouraging and indicate that, with additional drilling, the resource base may increase by almost 100%. This potential quantity and grade is conceptual in nature and there has been insufficient exploration to define a Mineral Resource. It is uncertain if further exploration will result in the determination of a Mineral Resource.

U <sub>3</sub> O <sub>8</sub> Cutoff	Tonnes	U <sub>3</sub> O <sub>8</sub>	Mo	V	Ni	Zn
(g/t)	(Bt)	(g/t)	(g/t)	(g/t)	(g/t)	(g/t)
100	1.0-2.0	150-160	200-210	1450-1600	310-330	430-450

Table 3: Häggån Permit, Exploration Target

U <sub>3</sub> O <sub>8</sub> Cutoff	Tonnes	U <sub>3</sub> O <sub>8</sub>	Мо	V	Ni	Zn
(g/t)	(Bt)	(g/t)	(g/t)	(g/t)	(g/t)	(g/t)
100	0.3-0.7	125-138	165-185	1140-1275	240-270	340-380

Table 4: Marby Permit, Exploration Target

These tonnages and grades convert to the following amounts of metal in millions of pounds:

U <sub>3</sub> O <sub>8</sub> Cutoff	U <sub>3</sub> O <sub>8</sub>	Mo	V	Ni	Zn
(ppm)	(Mlb)	(Mlb)	(Mlb)	(Mlb)	(Mlb)
100	350-650	450-900	3200-7000	650-1450	950-1950

Table 5: Häggån Permit, Exploration Target contained metal
Mlb = Million pounds

U <sub>3</sub> O <sub>8</sub> Cutoff	U₃O <sub>8</sub>	Mo	V	Ni	Zn
(ppm)	(Mlb)	(Mlb)	(Mlb)	(Mlb)	(Mlb)
100	90-190	120-250	850-1750	200-350	

Table 6: Marby Permit, Exploration Target contained metal

Mlb = Million pounds



## **Comparison with other Uranium Resources**

The resource, using a 100ppm  $U_3O_8$  cutoff, gives the Häggån Project a contained uranium content of 800 million pounds. This resource places Häggån in the top two largest undeveloped uranium resources reported in compliance with ASX or TSX requirements.

			Grade	
Project	Company	Mlbs	(%)	Location
Viken	Continental	1047	0.02	Sweden
Häggån	Aura Energy	800	0.02	Sweden
Elkon	ARMZ	705	0.12	Russia
Husab	Extract	513	0.05	Namibia
Kvanefeld	<b>Greenland Minerals</b>	512	0.03	Greenland
Cigar Lake	Cameco/Areva	352	18.2	Canada
Letlhakane	Acap	351	0.02	Botswana
Imouraren	Areva	350	0.11	Niger
Jabiluka	ERA	343	0.46	Northern Territory
Itatira	INB	315	0.09	Brazil
	Viken Häggån Elkon Husab Kvanefeld Cigar Lake Letlhakane Imouraren Jabiluka	Viken Continental  Häggån Aura Energy  Elkon ARMZ  Husab Extract  Kvanefeld Greenland Minerals  Cigar Lake Cameco/Areva  Letlhakane Acap  Imouraren Areva  Jabiluka ERA	Viken Continental 1047  Häggån Aura Energy 800  Elkon ARMZ 705  Husab Extract 513  Kvanefeld Greenland Minerals 512  Cigar Lake Cameco/Areva 352  Letlhakane Acap 351  Imouraren Areva 350  Jabiluka ERA 343	VikenContinental10470.02HäggånAura Energy8000.02ElkonARMZ7050.12HusabExtract5130.05KvanefeldGreenland Minerals5120.03Cigar LakeCameco/Areva35218.2LetlhakaneAcap3510.02ImourarenAreva3500.11JabilukaERA3430.46

Drilling that has been used in this resource statement covers only 25% of Aura's permit areas at Häggån. The majority of Aura's permits in the district remain untested.

## **Project Development Activities**

Dr Bob Beeson commented, "This resource upgrade continues to demonstrate the vast size of the uranium mineralisation in the Häggån Project. Aura has only defined a portion of the total uranium field as resources to date, as evidenced by the further 440 - 840 million pounds in the Exploration Target."

"Aura only drilled a 13-hole resource programme this year, but again we are adding well over 10 million pounds of uranium to the resource per drill hole".

"This expanded resource can be expected to underpin a substantial increase in the 25 year mine life modelled in the May Scoping Study".

Aura is rapidly progressing with its development activities at Häggån and, as announced in August, is in exclusive negotiations with a potential strategic partner in relation to the project.

Final planning for the pre-feasibility study on the Häggån Project has now begun with the penultimate stage of metallurgical test work already on the way as well as work on mining studies.



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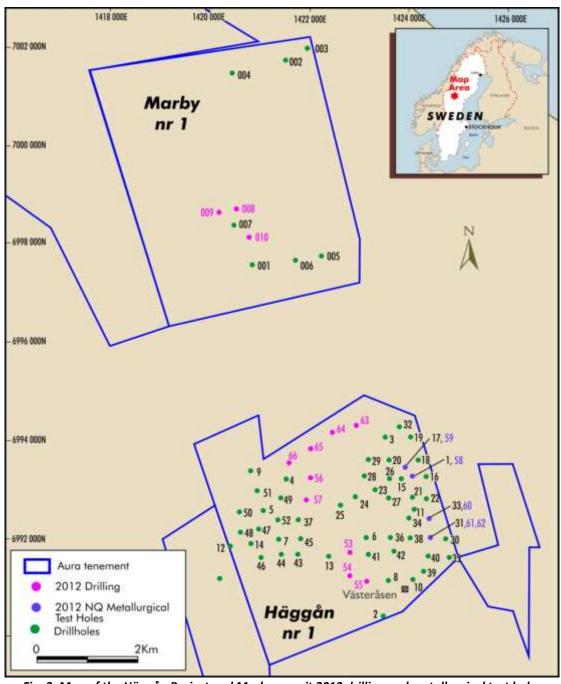


Fig. 2: Map of the Häggån Project and Marby permit 2012 drilling and metallurgical test holes



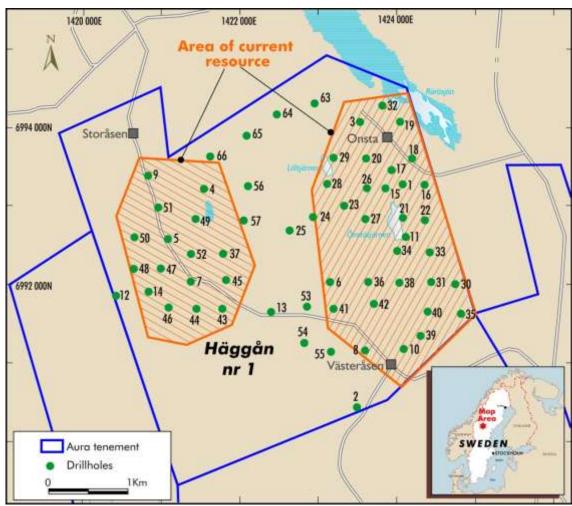


Fig. 3: Map of the Häggån Project drilling holes

U <sub>3</sub> O <sub>8</sub> Cutoff	Tonnes	U <sub>3</sub> O <sub>8</sub>	Мо	V	Ni	Zn
(ppm)	(Bt)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
100	2.15	157	209	1551	322	438
120	2.06	159	212	1574	327	443
140	1.69	165	220	1654	340	458
160	0.94	177	238	1775	364	480
180	0.31	192	260	1861	388	492

Table 7: Häggån permit Inferred Resource estimates Significant figures quoted do not imply precision and are to minimise round-off errors.

U <sub>3</sub> O <sub>8</sub> Cutoff (g/t)	Tonnes (Bt)	U <sub>3</sub> O <sub>8</sub> (g/t)	Mo (g/t)	V (g/t)	Ni (g/t)	Zn (g/t)
100	1.0-2.0	150-160	200-210	1450-1600	310-330	430-450
140	1.0-1.6	160-170	210-220	1550-1700	325-350	450-480
180	0.1-0.4	180-200	270-300	1750-1900	370-420	480-510

Table 8: Häggån permit Exploration Target estimates



U <sub>3</sub> O <sub>8</sub> Cutoff	Tonnes	U <sub>3</sub> O <sub>8</sub>	Mo	V	Ni	Zn
(ppm)	(Bt)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
100	0.20	136	185	1170	249	353
120	0.16	144	195	1251	263	384
140	0.09	153	210	1276	272	406
160	0.02	167	224	1485	306	452
180	0.001	182	261	1932	382	621

Table 9: Marby permit Inferred Resource estimates
Significant figures quoted do not imply precision and are to minimise round-off errors.

U <sub>3</sub> O <sub>8</sub> Cutoff (g/t)	Tonnes (Bt)	U3O8 (g/t)	Mo (g/t)	V (g/t)	Ni (g/t)	Zn (g/t)
100	0.3-0.7	125-138	165-185	1140-1275	240-270	340-380
140	0.1-0.3	145-165	190-225	1390-1590	280-320	400-470
180	0.0-0.01	180-200	250-300	1960-2000	390-450	560-610

**Table 10: Marby permit Exploration Target estimates** 

## **Competent Persons Statement**

Mr. Arnold van der Heyden takes responsibility for estimation of uranium and associated metals in the Häggån Resource. Mr. van der Heyden is a director of H&SC and is a competent person in the meaning of JORC having had around thirty years relevant experience in exploration and estimation of uranium and other metal resources in many parts of the world. He is a member of the Australian Institute of Geoscientists. Mr. van der Heyden consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Dr Robert Beeson has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking. This qualifies Dr Beeson as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Robert Beeson consents to the inclusion in the report of the matters based on his information in the form and context in which it appears. Dr Beeson is a member of the Australian Institute of Geoscientists. Dr Beeson takes responsibility for data integrity, QA/QC and the requirement of "reasonable prospects for eventual economic extraction" for the reporting of Häggån Resources at the quoted cut-off grades.



## **Estimation procedure**

In estimating the resources H&SC assumed that mineralisation will be mined at a large scale using 10 metre benches. It has been further assumed that contacts between mineralisation and non-mineralised units can be identified. It is considered that dilution with inter-bedded and overlying limestone and massive shale units will be kept to a minimum commensurate with large scale mining.

Two metre composited intervals were used to interpolate grades into 200 metre by 200 metre by 10 metre panels, discretised to five by five by two. Two search passes used ordinary kriging to populate blocks the details of which are shown in the table below.

#### **Search parameters**

Axis	Pass 1	Pass 2	Azimuth	Dip					
X	400 m	800 m	10	0					
Y	400 m	800 m	100	0					
Z	10 m	20 m	190	90					
Composite Data Requirements									
Minimum data points (total)	8	8							
Maximum points per sector	6	6							
Sectors	4	4							
Hole count	2	1							

Blocks populated in Pass 1 were attributed to the Inferred Resource whereas those populated in Pass 2 were attributed to the Exploration Target inventory.

Ordinary kriging is informed by variograms of the mineralised lithotype for each of the metals estimated. The range of the uranium variogram exceeded 200 metres in the vertical dimension and was in excess of 700 metres in the horizontal plane with a small elongation in the east-west direction. Variograms of V, Ni, Zn, and Mo varied little from the uranium variograms. H&SC considers that the continuity of mineralisation is demonstrably very high and suitable for resource estimation.

Density measurements using a non-wax immersion technique has been made over a selection of typical lithologies in the mineralised Alum Shale sequence. Application of a density of 2.52 g/cc measured for samples of mineralised shale to the proportion of the panel estimates the tonnage of mineralised material within each panel.