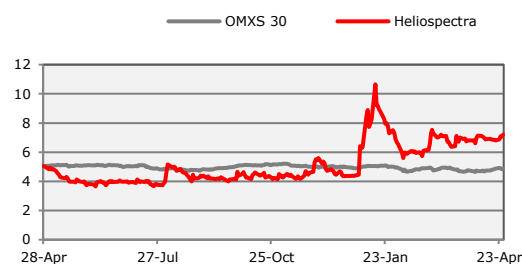


**Summary**
**Heliospectra (HELIO.ST)**
**Strong start to 2018**

- Net sales in Q1 amounted to SEK 9.4m, which was just below our forecast of SEK 11m. At the same time, other income was slightly higher than expected and cost items lower than forecast. The operating loss of SEK -6.8m was therefore better than the expected SEK -8m.
- Heliospectra started 2018 with great strength and has announced a number of major orders. The orders announced in 2018 amount to approximately SEK 24m, corresponding to 66% of the full-year sales in 2017.
- The report does not cause any changes in our view of the company. We reiterate our valuation range of SEK 2-13.4 per share with a fair value of SEK 7.4 per share in our base case.

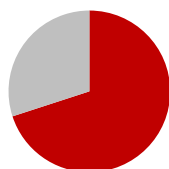
List: Nasdaq First North  
 Market Cap: 248 MSEK  
 Industry: Industrial Goods & Services  
 CEO: Ali Ahmadian  
 Chairman: Andreas Gunnarsson



Note: this is a translation of our Swedish update dated the 28th of April 2018.

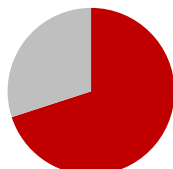
**Redeye Rating (0 – 10 points)**

Management



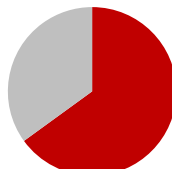
7.0 points

Ownership



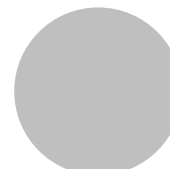
7.0 points

Profit outlook



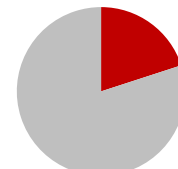
6.5 points

Profitability



0.0 points

Financial strength



2.0 points

**Key Financials**

	2016	2017	2018E	2019E	2020E
Revenue, MSEK	23	36	58	85	121
Growth	68%	56%	62%	45%	43%
EBITDA	-38	-29	-18	-11	7
EBITDA margin	-167%	-80%	-32%	-13%	5%
EBIT	-43	-33	-22	-14	4
EBIT margin	-185%	-92%	-38%	-16%	3%
Pre-tax earnings	-46	-33	-22	-14	3
Net earnings	-46	-33	-22	-14	3
Net margin	-199%	-92%	-38%	-17%	3%
Dividend/Share	0.00	0.00	0.00	0.00	0.00
EPS adj.	-1.30	-0.94	-0.63	-0.40	0.10
P/E adj.	-5.9	-4.4	-11.2	-17.5	72.1
EV/S	9.0	3.0	4.0	2.9	2.0
EV/EBITDA	-5.4	-3.8	-12.6	-23.1	36.8

**Share information**

Share price (SEK)	7.1
Number of shares (m)	35.1
Market Cap (MSEK)	248
Net cash (MSEK)	29
Free float (%)	56 %
Daily turnover ('000)	120

Analysts:  
 Dennis Berggren  
 dennis.berggren@redeye.se

**Important information:** All information regarding limitation of liability and potential conflicts of interest can be found at the end of the report.

## Redeye Rating: Background and definitions

The aim of a Redeye Rating is to help investors identify high-quality companies with attractive valuation.

### Company Qualities

The aim of Company Qualities is to provide a well-structured and clear profile of a company's qualities (or operating risk) – its chances of surviving and its potential for achieving long-term stable profit growth.

We categorize a company's qualities on a ten-point scale based on five valuation keys; 1 – Management, 2 – Ownership, 3 – Profit Outlook, 4 – Profitability and 5 – Financial Strength.

Each valuation key is assessed based a number of quantitative and qualitative key factors that are weighted differently according to how important they are deemed to be. Each key factor is allocated a number of points based on its rating. The assessment of each valuation key is based on the total number of points for these individual factors. The rating scale ranges from 0 to +10 points.

The overall rating for each valuation key is indicated by the size of the bar shown in the chart. The relative size of the bars therefore reflects the rating distribution between the different valuation keys.

### Management

Our Management rating represents an assessment of the ability of the board of directors and management to manage the company in the best interests of the shareholders. A good board and management can make a mediocre business concept profitable, while a poor board and management can even lead a strong company into crisis. The factors used to assess a company's management are: 1 – Execution, 2 – Capital allocation, 3 – Communication, 4 – Experience, 5 – Leadership and 6 – Integrity.

### Ownership

Our Ownership rating represents an assessment of the ownership exercised for longer-term value creation. Owner commitment and expertise are key to a company's stability and the board's ability to take action. Companies with a dispersed ownership structure without a clear controlling shareholder have historically performed worse than the market index over time. The factors used to assess Ownership are: 1 – Ownership structure, 2 – Owner commitment, 3 – Institutional ownership, 4 – Abuse of power, 5 – Reputation, and 6 – Financial sustainability.

### Profit Outlook

Our Profit Outlook rating represents an assessment of a company's potential to achieve long-term stable profit growth. Over the long-term, the share price roughly mirrors the company's earnings trend. A company that does not grow may be a good short-term investment, but is usually unwise in the long term. The factors used to assess Profit Outlook are: 1 – Business model, 2 – Sale potential, 3 – Market growth, 4 – Market position, and 5 – Competitiveness.

### Profitability

Our Profitability rating represents an assessment of how effective a company has historically utilised its capital to generate profit. Companies cannot survive if they are not profitable. The assessment of how profitable a company has been is based on a number of key ratios and criteria over a period of up to the past five years: 1 – Return on total assets (ROA), 2 – Return on equity (ROE), 3 – Net profit margin, 4 – Free cash flow, and 5 – Operating profit margin or EBIT.

### Financial Strength

Our Financial Strength rating represents an assessment of a company's ability to pay in the short and long term. The core of a company's financial strength is its balance sheet and cash flow. Even the greatest potential is of no benefit unless the balance sheet can cope with funding growth. The assessment of a company's financial strength is based on a number of key ratios and criteria: 1 – Times-interest-coverage ratio, 2 – Debt-to-equity ratio, 3 – Quick ratio, 4 – Current ratio, 5 – Sales turnover, 6 – Capital needs, 7 – Cyclicity, and 8 – Forthcoming binary events.

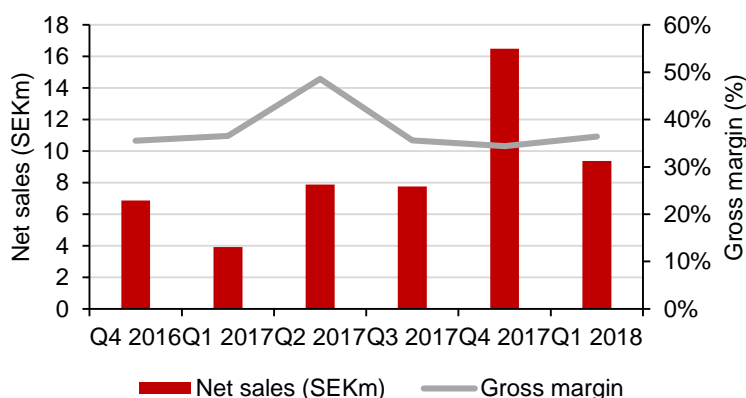
## In line with expectations

Revenue and order intake  
continue to develop well

Heliospectra reported net sales of SEK 9.4 million in Q1, which represents an increase of 140% compared to Q1 2017, but just below our forecast of SEK 11 million. The company reports that orders received during January-March amounted to SEK 12.1 million, which represents an increase of 31% compared to the same period in 2017. Furthermore, Heliospectra has announced two major orders in April that are not included (see next page).

At the same time, other operating income of SEK 0.8 million was slightly higher than expected, which meant that revenues ended up in line with our forecast. We estimate that these consist of financing of development projects (such as the EDEN project within European Horizon) as well as lower revenues from the newly introduced Technical Services.

### Heliospectra: Sales and gross margin



Source: Redeye Research

The gross margin for the period was 36.4%, which was slightly lower than our 42% forecast. CEO Ali Ahmadian commented that the major orders put some pressure on margins while also allowing the company to streamline its production process. Our opinion is that the gross margin in the coming quarters is likely to be in line with the margin shown before improving in the longer run.

### Heliospectra: Actual vs Estimates

(SEKm)	Q1'17	Q1'18E	Utfall	Diff. (%)
Net sales	3,9	11	9,4	-15%
Gross margin (%)	37%	42%	36%	-13%
EBITDA	-9,3	-6,9	-6,1	12%
EBIT	-10,4	-8,0	-6,8	15%

Source: Redeye Research

The company's other external costs and staffing costs were lower than expected, resulting in EBITDA of SEK -6.1 million, which was slightly better than our forecast of around SEK -7 million. At the same time, the company's D&A were lower than expected, which meant that the operating loss of SEK -6.8 million was better than our forecast (SEK -8 million).

Total cash flow for the period amounted to SEK -9.4 million, with SEK -2.6 million attributable to changes in working capital and the largest change being in the company's current liabilities (SEK -7.8 million). The negative cash flow of SEK 9.4 million means that the company had SEK 31.3 million in cash at the end of the period.

In summary, the report does not contain any surprises, and we consider that Heliospectra is delivering in line with our expectations. The company has had a very strong start in 2018 and we estimate that it has good potential to show high growth for the rest of the year. CEO Ali Ahmadian continues to reiterate his focus on strengthening Heliospectra's positioning in the market by ensuring the quality of its products and placing great importance on customer service.

#### **New CFO**

During the period Heliospectra also announced recruitment of a new CFO, Magnus Svensson, who take up the role on 2 May 2018. Magnus last worked as Finance Director at Car-O-Liner and has previously held senior roles at Lindex and EY.

#### **Orders**

As we mentioned in previous comments, Heliospectra has had a very strong start to the year. The company has announced a number of major orders in 2018, with the sum of the estimated order values amounting to around SEK 24 million, corresponding to 66% of full-year sales in 2017.

*Very strong order intake  
in 2018*

<b>Orders announced during 2018</b>			
<b>Date</b>	<b>Customer</b>	<b>Order value (SEKm)</b>	<b>Delivery</b>
2018-01-03	Canadian customer	5.49	Q1
2018-03-08	AcquiFlow (Canada)	0.52	Q1
2018-03-20	Griffin Greenhouse Supplies	5.8	Q3
2018-03-29	Kew Royal Botanic Gardens	1.7	Q2
2018-04-05	Griffin Greenhouse Supplies	4.6	Q3
2018-04-23	Griffin Greenhouse Supplies	5.8	Q3

*Source: Redeye Research*

Particularly interesting are the deals that have gone through the distributor Griffin Greenhouse Supplies to a customer with a large cannabis growing facility in New England. This customer has now placed three orders for Heliospectra's E60 series, with the total order value amounting to approximately SEK 16 million.

All orders from the customer are scheduled for delivery during Q3 2018, indicating that this will be a new record quarter for the company. We have long talked about for the potential for major orders from individual customers, and this is very much illustrated by this customer project. Furthermore, not only the number of announced orders has increased compared to the corresponding period in 2017, but also the average order size.

Heliospectra reported an order intake of SEK 12.1 million during January-March. We assume that the order from the Canadian customer of SEK 5.5 million was included in the order intake for October-December 2017 and is therefore not included in the amount of SEK 12.1 million. This would mean that approximately SEK 4 million of the reported order intake consists of orders that were not announced.

### **HelioCORE launched**

Heliospectra has also announced that its new HelioCORE control system is now officially launched and available for ordering. The company has performed beta testing with its customers Greenbelt Microgreens and John Innes Centre, which are using the control system.

According to the press release published on April 26, John Innes Centre has managed to shorten the wheat cultivation process by combining Heliospectra's lighting with the control system, thus achieving a 57% improvement in the speed of growing wheat from seed to seed. Greenbelt Microgreens (Ontario, Canada) is a commercial greenhouse that tested HelioCORE with the aim of ensuring consistent light intensity during the dark winter months of the year to ensure a consistent and high quality of crops in a cost-effective manner.

*HelioCORE adds clear value for its customers*

We believe that the two customer cases illustrate clear economic and qualitative benefits of using Heliospectra's products. The ability to shorten cultivation processes means that it is possible to grow more over a given period of time, while the control system provides data that can be used to further improve the cultivation process. Furthermore, the control system provides the opportunity to forecast the yield on the crop, which is a vital factor for the company's customers. As the control system also has the ability to adjust the light intensity according to natural light conditions, it is also possible to achieve energy savings.

As mentioned earlier, the company applies a licence model for the control system, opening up the potential for recurring revenue. We also expect the control system to foster improved margins. Furthermore, the launch of this unique system has greatly strengthened Heliospectra's position as a leading provider of lighting systems. At the same time, we believe that installations of the control system in the long term will have the potential to generate lock-in effects on the company's customers, which could thus be an important factor for the company's long-term growth.

## Forecasts

Heliospectra has had a strong start to 2018. We have not made any changes to our long-term sales forecasts, but only updated our forecasts for the coming quarters based on the company's most recently announced orders.

In accordance with what we mentioned in our previous update, we estimate that the company had an order backlog of approximately SEK 7.8 million. Order intake during January-March amounted to SEK 12.1 million while the company reported net sales of around SEK 9.4 million, indicating that the order backlog at the end of March should have been around SEK 10 million. On top of this are the latest two orders from Griffin Greenhouse Supplies with a combined order value of approximately SEK 10.4 million.

We therefore forecast that Q2 sales will be on par with Q1 and will then increase significantly during Q3 2018. The company has announced that all orders from Griffin are scheduled for delivery in Q3, which means that Q3 sales should constitute a new record quarter for the company given that the value of these orders totals SEK 16.2 million. There are also two months of Q2 remaining within which the company can potentially announce additional orders for delivery during Q2 and Q3.

In recent quarters we have had overly high expectations for Heliospectra's gross margin and have therefore made minor adjustments to this for the coming quarters. However, we firmly believe that the company has the potential to raise its margin somewhat in the long term; to a certain extent through more efficient logistics and production process for larger sales, but also through the introduction of HelioCORE and Technical Services.

*Expect no major improvement to gross margin in 2018*

<b>Heliospectra: Base case estimates</b>									
<b>(SEKm)</b>	<b>2016</b>	<b>2017</b>	<b>Q1'18A</b>	<b>Q2'18E</b>	<b>Q3'18E</b>	<b>Q4'18E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
Net sales	23.1	36.0	9.4	8.0	22.0	19.0	58.4	84.7	121.1
CoGS	-15.8	-22.3	-6.0	-5.0	-13.5	-11.7	-36.2	-49.1	-64.2
Gross margin (%)	32%	40%	36%	38%	38%	38%	38%	42%	47%
EBITDA	-38.4	-28.8	-6.1	-7.0	-0.9	-4.3	-18.4	-10.8	6.6
EBIT	-42.8	-33.1	-6.8	-7.9	-1.8	-5.5	-22.0	-13.9	3.8
Growth (%)	68%	56%	-43%	-14%	174%	-14%	62%	45%	43%
EBIT margin (%)	-163%	-90%	-67%	-93%	-8%	-29%	-37%	-16%	3%

Source: Redeye Research

At the same time, we have made minor downward adjustments to expected costs. In summary, we expect sales to be somewhat lower in Q2, while cost items are expected to be in line with the previous quarter.

We are also lowering our expectations for the gross margin in 2019, but we retain our assumption of a significantly improved margin in 2020 and in later years due to the substantial increase in sales of HelioCORE and Technical Services at that point.

Improving the gross margin is a vital challenge for the company as Heliospectra needs to achieve significantly higher sales levels to reach breakeven with its existing cost structure.

As mentioned earlier, this means that there is a risk the company will need to raise external capital before breaking even. However, if Heliospectra continues to develop strongly and delivers according to our expectations, we see no obstacle to its ability to borrow the necessary capital.

### **Bull case**

We have not made any major changes to our bull case either. Those changes that have been made are minor downward adjustments to the company's staffing costs and other external costs. We have also made a marginal adjustment to the gross margin. Our sales forecasts, however, remain in line with previous updates as we believe the company has delivered to date according to our expectations. Heliospectra has shown that orders from individual customers may exceed SEK 10 million (New England customer: SEK 16 million), indicating that there is potential for taking significant orders and thereby growing sharply in the following years.

*Clearer potential for large orders from individual customers*

<b>Heliospectra: Bull case estimates</b>									
<b>(SEKm)</b>	<b>2016</b>	<b>2017</b>	<b>Q1'18A</b>	<b>Q2'18E</b>	<b>Q3'18E</b>	<b>Q4'18E</b>	<b>2018E</b>	<b>2019E</b>	<b>2020E</b>
Net sales	23.1	36.0	9.4	11.0	23.0	24.0	67.4	105.1	147.2
CoGS	-15.8	-22.3	-6.0	-6.7	-13.8	-14.6	-41.1	-57.7	-76.5
Gross margin (%)	32%	40%	36%	39%	40%	39%	39%	45%	48%
EBITDA	-38.4	-28.8	-6.1	-6.1	-0.2	-3.8	-16.3	0.2	20.5
EBIT	-42.8	-33.1	-6.8	-7.0	-1.1	-5.0	-19.9	-3.0	17.0
Growth (%)	68%	56%	-43%	18%	109%	4%	87%	56%	40%
EBIT margin (%)	-163%	-90%	-67%	-61%	-5%	-21%	-29%	-3%	11%

Source: Redeye Research

As before, this scenario is based on assumptions of higher growth but above all significantly higher margins due to economies of scale and successful commercial launches of HelioCORE and Technical Services. In this scenario we expect larger orders than in the base case, especially from growers of food and medical cannabis. However, we assume that the larger orders will continue to pressure the margin on each individual deal but that the company has good potential to reduce unit costs and logistics costs. In the long run, we assume that the company is successful in launching a complete biofeedback system, further improving the potential to continue to grow strongly after 2020. As before, we predict that the company will reach breakeven at EBITDA level in 2019 and that Heliospectra will therefore be able to manage without raising external capital.

**Bear case**

As with the previous scenarios, we also leave our forecasts untouched in our downbeat bear case. However, we have adjusted our quarterly forecasts for 2018 based on the current order situation, as we know that the company has shipments worth about SEK 16 million for the third quarter. However, for Q2 and above all Q4, we make somewhat more conservative assumptions and do not expect such high sales as in the previous scenario.

We maintain our long-term forecasts and expect that the company will show high growth in 2018-2020 based on assumptions of larger orders from new customers as well as ongoing follow-up orders from existing customers. One difference from the previous scenario is that we expect to see a smaller financial impact from the launch of HelioCORE and Technical Services. We therefore expect somewhat lower sales and a smaller improvement in the gross margin over the coming years compared to the previous scenario.

Heliospectra: Bear case estimates									
(SEKm)	2016	2017	Q1'18A	Q2'18E	Q3'18E	Q4'18E	2018E	2019E	2020E
Net sales	23.1	36.0	9.4	7.0	19.0	9.0	44.4	59.5	80.3
CoGS	-15.8	-22.3	-6.0	-4.2	-11.8	-5.6	-27.5	-35.1	-47.4
Gross margin (%)	32%	40%	36%	40%	38%	38%	38%	41%	41%
EBITDA	-38.4	-28.8	-6.1	-8.0	-2.3	-8.2	-24.7	-21.7	-14.0
EBIT	-42.8	-33.1	-6.8	-8.8	-3.2	-9.4	-28.3	-24.8	-15.9
Growth (%)	68%	56%	-43%	-25%	170%	-53%	23%	34%	35%
EBIT margin (%)	-163%	-90%	-67%	-136%	-17%	-104%	-63%	-41%	-19%

Source: Redeye Research

The sales forecast for full-year 2018 has been marginally adjusted upward to around SEK 44 million, based on the strong order intake during the first four months of the year. Assumptions of lower sales growth in 2019 and 2020 (compared to the base and bull cases) mean that the company does not achieve sufficiently high sales to reach breakeven before its current cash is consumed.



## Valuation

In valuing the company, we use a discount rate of 13.8%. The discount rate (WACC) we use is based on a number of different parameters that together form Redeye's rating model. The underlying factors aim at capturing the company-specific risk and take into account everything from management and owners to market position and the balance sheet. However, we ignore the stock's liquidity and volatility, which differentiates our calculation of WACC from most others.

We have updated our rating of Heliospectra by increasing the management rating by 1p as we believe that management has followed up on previously announced strategies, launched interesting new services, and increased sales and order intake while reducing costs somewhat. At the same time, we have lowered the financial strength rating by 1p as there is a risk that the company will need to raise external capital in the next few years. The net effect of the changes is that our discount rate (WACC) is increased by 0.2% (from 13.6% previously).

### Base case

We believe that the company has delivered in line with our expectations recently, and we therefore keep our assumptions that it will grow strongly in the coming years. Heliospectra has vigorous momentum in the medical plant segment and further good potential for large orders from growers of food crops. Heliospectra has also introduced two new services that further strengthen the company's positioning. We therefore believe that it has good opportunities to continue winning major business.

Heliospectra: Base case assumptions			
Assumptions	2018-2020	2021-	DCF valuation
Sales growth (CAGR)	49.8%	15.0%	WACC 13.8%
EBIT margin (avg)	-17.0%	22.9%	NPV of FCF 120
			NPV of terminal value 100
<b>Terminal</b>			
Terminal growth	2.0%		EV 220
EBIT margin	18.7%		Net cash 38
EV/EBIT exit multiple	3.4x		<b>DCF value 258</b>
			<b>Fair value 7.4</b>
			Current shareprice 7.1
			<b>Potential/Risk 4%</b>

<sup>†</sup>As per 2017-12-31

Source: Redeye Research

However, we have made minor changes to some forecasts. There are downward adjustments to our cost forecasts, alongside small changes to the gross margin for the near future. However, we expect the company to increase its margin in the longer term, in accordance with our earlier reasoning. We have also made a cut to the terminal operating margin. In summary, the effects offset each other and we reiterate our **fair value of SEK 7.4 per share in our base case.**

*Fair value of SEK 7.4  
reiterated in base case*

### Bull case

Our bull case is based on Heliospectra continuing to show a very high rate of growth over the next few years. We expect the company to continue announcing deals at the same rate as at the beginning of the year, resulting in a high level of growth in 2018 and 2019. In the long term, we also expect a successful launch of the control system, which leads to recurring revenue, higher margins and further sales of lighting systems. We also assume larger future revenues from the Technical Services consulting arm. In the long run, we predict an introduction of the biofeedback system.

*Bull case based on assumptions of higher growth and significantly improved margins*

Assumptions of higher sales growth and a significantly improved gross margin result in the company being forecasted to reach breakeven earlier and subsequently generate positive cash flows.

<b>Heliospectra: Bull case assumptions</b>				
<b>Assumptions</b>	<b>2018-2020</b>	<b>2021-</b>	<b>DCF valuation</b>	
Sales growth (CAGR)	59.9%	16.7%	WACC	13.8%
EBIT margin (avg)	-6.9%	30.2%	NPV of FCF	237
			NPV of terminal value	196
<b>Terminal</b>				
Terminal growth	2.0%		EV	433
EBIT margin	27.0%		Net cash <sup>1</sup>	38
EV/EBIT exit multiple	1.7x		<b>DCF value</b>	<b>472</b>
			<b>Fair value</b>	<b>13.4</b>
			Current shareprice	7.1
			<b>Potential/Risk</b>	<b>90%</b>

<sup>1</sup>As per 2017-12-31

Source: Redeye Research

The forecasts presented in the previous section, together with the assumptions above, yield a **fair value of SEK 13.4 per share in our optimistic bull case.**

### Bear case

Our bear case also assumes that the company continues to grow in the coming years, but it anticipates a lower rate of growth than in our previous two scenarios. The estimated sales growth is based on assumptions of a number of major orders from growers of food crops and cannabis. However, we predict that the company fails to improve its gross margin to the same extent, based on assumptions of lower economies of scale due to lower sales and a less successful launch of HelioCORE.

<b>Heliospectra: Bear case assumptions</b>				
<b>Assumptions</b>	<b>2018-2020</b>	<b>2021-</b>	<b>DCF valuation</b>	
Sales growth (CAGR)	30.6%	13.7%	WACC	13.8%
EBIT margin (avg)	-41.7%	11.5%	NPV of FCF	-10
			NPV of terminal value	41
<b>Terminal</b>				
Terminal growth	2.0%		EV	30
EBIT margin	12.5%		Net cash <sup>1</sup>	38
EV/EBIT exit multiple	8.3x		<b>DCF value</b>	<b>69</b>
			<b>Fair value</b>	<b>2.0</b>
			Current shareprice	7.1
			<b>Potential/Risk</b>	<b>-72%</b>

<sup>1</sup>As per 2017-12-31

Source: Redeye Research

We have not made any major changes to our assumption of gross margins from previous updates, but we have lowered our cost forecast slightly. In this scenario we have also slightly lowered the terminal operating margin. Our assumptions result in an unchanged fair value of **SEK 2 per share in our bear case**.

*Unchanged valuation range*

Our view of the company is intact and we reiterate our **valuation range from SEK 2 per share in our bear case to SEK 13.4 per share in our bull case**. The differences between the scenarios are mainly due to sales growth assumptions, the launch of HelioCORE and the company's ability to improve its gross margin.

## **Investment case**

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### **Approaching an inflection point as sales focus starts paying-off**

Heliospectra is in the middle of a transition from a research company with little focus on sales to become a leading global player in the growing market for intelligent lighting solutions. With a strong position in the research market and several important contracts and partnerships in the medical plant segment as well as in the greenhouse cultivation segment, Heliospectra is in pole position to benefit from the growth in the market for LED grow lights – a market projected to grow at a CAGR of 30-40 percent from 2014-2020.

We see Heliospectra as well positioned to sustain its position as one of the leaders in the market for intelligent lighting systems. Heliospectra is on the verge of its big market breakthrough – that said, individual orders still have a large impact on sales and long sales cycles can delay the harvest.

### **Rapid market growth driven by global trends**

LED grow lights are more energy efficient than traditional HIS/HPS lamps traditionally used in greenhouses and growers increasingly replace traditional lighting solutions in commercial greenhouse operations in Europe, North America and Asia. Heliospectra's intelligent lighting systems also provide growers benefits of increased automation and higher plant quality thus making the incentives to switch from HID/HPS even higher. If Heliospectra manage to secure large orders from commercial growers in the cultivated greenhouse segment there are reasons to believe that Heliospectra will draw more investor attention.

### **Medical plant segment booming thanks to legalization**

Heliospectra has established itself as a well renowned player in the legal marijuana segment and will benefit from the ongoing legalization movement in the US as well as in other countries. The market is still very much in its infancy in the US and rapid growth is expected as legalization continues not only in the US but also in other parts of the world.

### **Proprietary technology strengthens case**

Heliospectra possesses intellectual property rights in their biofeedback system allowing autonomous plant growth. The system incorporating LED grow lights, proprietary software and sensors is patented, thus making it harder for competitors to offer growers the same benefits. Heliospectra's patented system and the company's software solutions offer growers the option of integration to lighting systems from competitors. This opens up an opportunity for Heliospectra to capitalize on its IP in multiple ways.

**Strong ownership**

Heliospectra has major shareholders which provide the support and capital strength needed to fund future growth, which has been illustrated multiple times through their willingness to support the company financially through both debt and equity financing.

We see find the following potential catalysts to be most relevant for Heliospectra's share in the next twelve months:

- Large follow-up orders from existing customer base
- Successful commercial launch of the HelioCORE system

**High potential and high risk**

Heliospectra is still at an early stage of commercialization and going forward there will be both successes and setbacks – very seldom do things go as planned. The major risks associated with an investment in Heliospectra are not technical but commercial. Heliospectra's challenges are its ability to:

- Rapidly grow sales in a competitive market
- Improve gross margins as volumes grow
- Need of additional funding due to delayed breakthrough

## Summary Redeye Rating

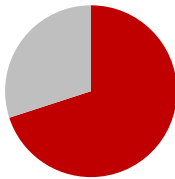
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The rating consists of five valuation keys, each constituting an overall assessment of several factors that are rated on a scale of 0 to 2 points. The maximum score for a valuation key is 10 points.

### Rating changes in the report

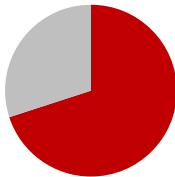
We have increased management rating by 1p and lowered financial strength by 1p.

Management 7.0p



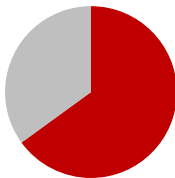
CEO Ahmadian seems to have the commercial and international focus that Heliospectra currently needs but has no previous track record as a CEO of a listed company. To mandate a higher rating Heliospectra's leadership we would like to see an increased transparency regarding the financial goals of the company as well as an increased average tenure among the management team.

Ownership 7.0p



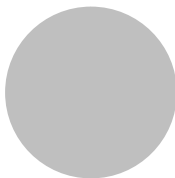
Heliospectra has a list of shareholders many small technology companies can only dream of. Heliospectra's largest shareholder is Gösta Welandson who has shown great commitment and engagement in supporting Heliospectra. The major shareholders provide support as well as capital and have a good reputation in the financial markets. The board hold a decent amount of shares, however, we would like to see top management as well as the board showing more commitment in Heliospectra through increased shareholdings in the company. With a stronger commitment from senior management and the board a higher ownership rating would be given.

Profit outlook 6.5p



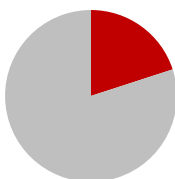
Heliospectra is active in a fast growing market and has secured important partnerships in all of its market segments. With a strong position in the research, AgTech and marijuana segments and a positive trend in the greenhouse cultivation segment, Heliospectra is well positioned for strong growth. Competitive advantages are secured by proprietary technology and first mover advantages. To raise the rating we would like to see a successful introduction of sensors and an ability to charge customers for software. We would also like to see Heliospectra cement its position as a leader in the LED grow light industry through increased sales and a return on equity (ROIC) exceeding our discount rate for a prolonged time period.

Profitability 0.0p



Heliospectra is currently losing money and even though we envisage Heliospectra showing profits in the future we want to see money in the bank before we give any credit. An upgrade to our profitability rating would require the company to at least show positive EBIT on a rolling twelve months basis.

Financial strength 2.0p



In order to raise Heliospectra's rating we want to see a situation where Heliospectra is no longer dependent on additional funding from its shareholders in order to fund its continued expansion. Heliospectra has main shareholders who multiple times have shown willingness to support the company financially through both debt and equity financing.

Income statement	2016	2017	2018E	2019E	2020E
Net sales	23	36	58	85	121
Total operating costs	-61	-65	-77	-95	-114
<b>EBITDA</b>	<b>-38</b>	<b>-29</b>	<b>-18</b>	<b>-11</b>	<b>7</b>
Depreciation	0	0	0	0	0
Amortization	-4	-4	-3	-3	-3
Impairment charges	0	0	0	0	0
<b>EBIT</b>	<b>-43</b>	<b>-33</b>	<b>-22</b>	<b>-14</b>	<b>4</b>
Share in profits	0	0	0	0	0
Net financial items	-3	0	0	0	0
Exchange rate dif.	0	0	0	0	0
<b>Pre-tax profit</b>	<b>-46</b>	<b>-33</b>	<b>-22</b>	<b>-14</b>	<b>3</b>
Tax	0	0	0	0	0
<b>Net earnings</b>	<b>-46</b>	<b>-33</b>	<b>-22</b>	<b>-14</b>	<b>3</b>

Balance	2016	2017	2018E	2019E	2020E
<b>Assets</b>					
<i>Current assets</i>					
Cash in banks	73	41	18	2	4
Receivables	6	10	12	13	15
Inventories	8	8	9	13	16
Other current assets	0	0	0	0	0
<b>Current assets</b>	<b>87</b>	<b>58</b>	<b>39</b>	<b>27</b>	<b>34</b>
<i>Fixed assets</i>					
Tangible assets	2	1	1	1	2
Associated comp.	0	0	0	0	0
Investments	0	0	0	0	0
Goodwill	0	0	0	0	0
Cap. exp. for dev.	0	0	0	0	0
O intangible rights	17	15	15	13	12
O non-current assets	0	0	0	0	0
<b>Total fixed assets</b>	<b>18</b>	<b>16</b>	<b>16</b>	<b>14</b>	<b>14</b>
Deferred tax assets	0	0	0	0	0
<b>Total (assets)</b>	<b>105</b>	<b>74</b>	<b>54</b>	<b>41</b>	<b>48</b>

Liabilities	2016	2017	2018E	2019E	2020E
<i>Current liabilities</i>					
Short-term debt	0	0	0	0	0
Accounts payable	13	15	18	19	24
O current liabilities	0	0	0	0	0
<b>Current liabilities</b>	<b>13</b>	<b>16</b>	<b>18</b>	<b>19</b>	<b>24</b>
Long-term debt	11	2	2	2	0
O long-term liabilities	0	9	9	9	9
Convertibles	0	0	0	0	0
<b>Total Liabilities</b>	<b>24</b>	<b>26</b>	<b>28</b>	<b>29</b>	<b>33</b>
Deferred tax liab	0	0	0	0	0
Provisions	0	0	0	0	0
Shareholders' equity	82	48	26	12	15
Minority interest (BS)	0	0	0	0	0
<b>Minority &amp; equity</b>	<b>82</b>	<b>48</b>	<b>26</b>	<b>12</b>	<b>15</b>
<b>Total liab &amp; SE</b>	<b>105</b>	<b>74</b>	<b>54</b>	<b>41</b>	<b>48</b>

Free cash flow	2016	2017	2018E	2019E	2020E
Net sales	23	36	58	85	121
Total operating costs	-61	-65	-77	-95	-114
Depreciations total	-4	-4	-4	-3	-3
<b>EBIT</b>	<b>-43</b>	<b>-33</b>	<b>-22</b>	<b>-14</b>	<b>4</b>
Taxes on EBIT	0	0	0	0	0
<b>NOPLAT</b>	<b>-43</b>	<b>-33</b>	<b>-22</b>	<b>-14</b>	<b>4</b>
Depreciation	4	4	4	3	3
<b>Gross cash flow</b>	<b>-38</b>	<b>-29</b>	<b>-18</b>	<b>-11</b>	<b>7</b>
Change in WC	12	-1	-1	-4	1
Gross CAPEX	-5	-2	-3	-1	-3
<b>Free cash flow</b>	<b>-31</b>	<b>-32</b>	<b>-22</b>	<b>-16</b>	<b>5</b>

Capital structure	2016	2017	2018E	2019E	2020E
Equity ratio	77%	65%	48%	29%	32%
Debt/equity ratio	13%	5%	8%	17%	0%
Net debt	-62	-38	-16	0	-4
Capital employed	19	10	10	12	11
Capital turnover rate	0.2	0.5	1.1	2.1	2.5

Growth	2016	2017	2018E	2019E	2020E
Sales growth	68%	56%	62%	45%	43%
EPS growth (adj)	-29%	-28%	-33%	-36%	-124%

DCF valuation		Cash flow, MSEK	
WACC (%)	13.8 %	NPV FCF (2018-2020)	-30
		NPV FCF (2021-2027)	138
		NPV FCF (2028-)	112
		Non-operating assets	41
		Interest-bearing debt	-2
		Fair value estimate MSEK	258
Assumptions 2017-2023 (%)			
Average sales growth	28.6 %	<b>Fair value e. per share, SEK</b>	<b>7.4</b>
EBIT margin	5.1 %	Share price, SEK	7.1

Profitability	2016	2017	2018E	2019E	2020E
ROE	-83%	-51%	-59%	-74%	25%
ROCE	-60%	-46%	-56%	-66%	26%
ROIC	-138%	-170%	-222%	-138%	32%
EBITDA margin	-167%	-80%	-32%	-13%	5%
EBIT margin	-185%	-92%	-38%	-16%	3%
Net margin	-199%	-92%	-38%	-17%	3%

Data per share	2016	2017	2018E	2019E	2020E
EPS	-1.30	-0.94	-0.63	-0.40	0.10
EPS adj	-1.30	-0.94	-0.63	-0.40	0.10
Dividend	0.00	0.00	0.00	0.00	0.00
Net debt	-1.77	-1.09	-0.46	0.00	-0.12
Total shares	35.11	35.11	35.11	35.11	35.11

Valuation	2016	2017	2018E	2019E	2020E
EV	208.3	109.0	231.8	248.0	243.7
P/E	-5.9	-4.4	-11.2	-17.5	72.1
P/E diluted	-5.9	-4.4	-11.2	-17.5	72.1
P/Sales	11.7	4.1	4.2	2.9	2.0
EV/Sales	9.0	3.0	4.0	2.9	2.0
EV/EBITDA	-5.4	-3.8	-12.6	-23.1	36.8
EV/EBIT	-4.9	-3.3	-10.5	-17.9	63.5
P/BV	3.3	3.1	9.5	20.7	16.1

Share performance		Growth/year	15/17e
1 month	4.8 %	Net sales	59.2 %
3 month	-3.0 %	Operating profit adj	-28.3 %
12 month	39.8 %	EPS, just	-30.5 %
Since start of the year	61.2 %	Equity	-43.3 %

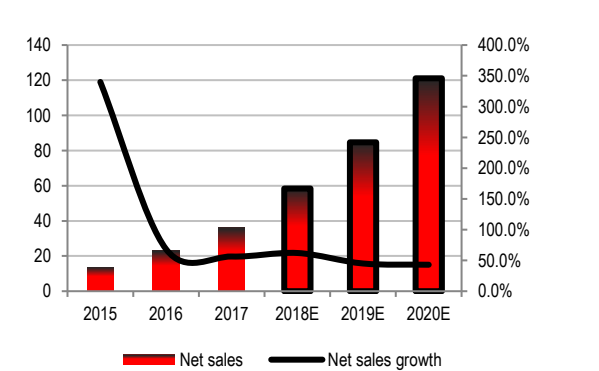
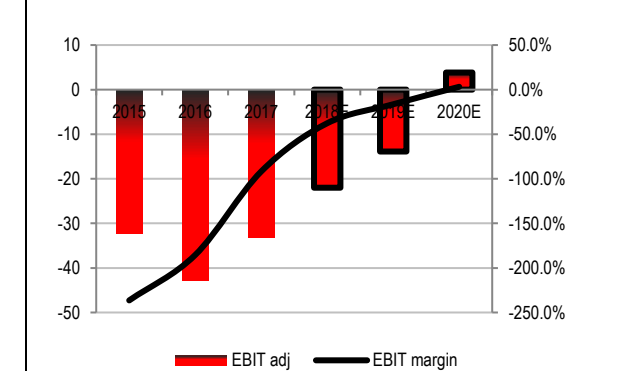
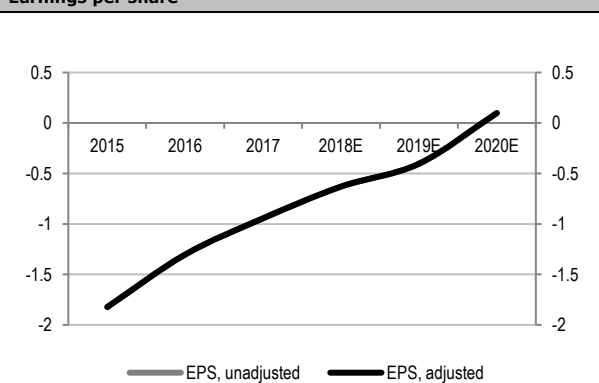
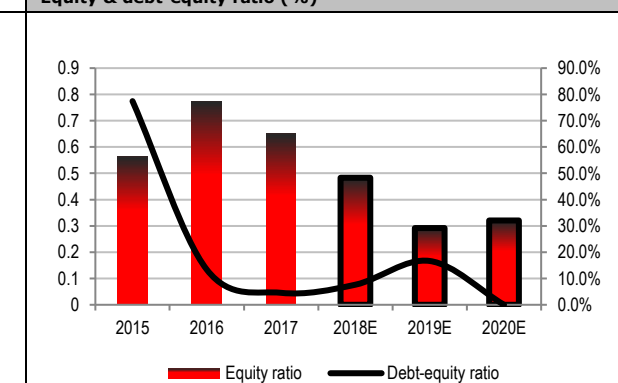
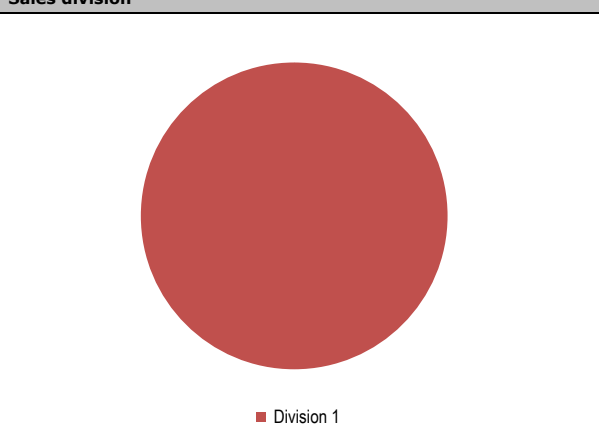
Shareholder structure %	Capital	Votes
Gösta Welandson med bolag	34.4 %	34.4 %
Mohammed Al Amoudi	10.1 %	10.1 %
Avanza Pension	5.9 %	5.9 %
Piba AB	1.1 %	1.1 %
Magowny Invest AB	1.0 %	1.0 %
Nordnet Pensionsförsäkring	0.9 %	0.9 %
Andreas Arnewid	0.8 %	0.8 %
Kent Gustafson	0.7 %	0.7 %
Rolf Johansson	0.7 %	0.7 %
Chrilotte AB	0.7 %	0.7 %

Share information	
Reuters code	HELIO.ST
List	Nasdaq First North
Share price	7.1
Total shares, million	35.1
Market Cap, MSEK	247.9

Management & board	
CEO	Ali Ahmadian
CFO	Magnus Svensson
IR	Ali Ahmadian
Chairman	Andreas Gunnarsson

Financial information	
Q1 report	August 24, 2018
Q2 report	October 26, 2018

Analysts	Redeye AB
Dennis Berggren	Mäster Samuelsgatan 42, 10tr
dennis.berggren@redeye.se	111 57 Stockholm

Revenue & Growth (%)	EBIT (adjusted) & Margin (%)																																										
 <table border="1"> <caption>Revenue &amp; Growth (%) Data</caption> <thead> <tr> <th>Year</th> <th>Net sales (M USD)</th> <th>Net sales growth (%)</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>12</td> <td>350.0%</td> </tr> <tr> <td>2016</td> <td>22</td> <td>80.0%</td> </tr> <tr> <td>2017</td> <td>35</td> <td>50.0%</td> </tr> <tr> <td>2018E</td> <td>58</td> <td>60.0%</td> </tr> <tr> <td>2019E</td> <td>85</td> <td>45.0%</td> </tr> <tr> <td>2020E</td> <td>120</td> <td>40.0%</td> </tr> </tbody> </table>	Year	Net sales (M USD)	Net sales growth (%)	2015	12	350.0%	2016	22	80.0%	2017	35	50.0%	2018E	58	60.0%	2019E	85	45.0%	2020E	120	40.0%	 <table border="1"> <caption>EBIT (adjusted) &amp; Margin (%) Data</caption> <thead> <tr> <th>Year</th> <th>EBIT adj (M USD)</th> <th>EBIT margin (%)</th> </tr> </thead> <tbody> <tr> <td>2015</td> <td>-35</td> <td>-250.0%</td> </tr> <tr> <td>2016</td> <td>-45</td> <td>-200.0%</td> </tr> <tr> <td>2017</td> <td>-35</td> <td>-100.0%</td> </tr> <tr> <td>2018E</td> <td>-22</td> <td>-50.0%</td> </tr> <tr> <td>2019E</td> <td>-15</td> <td>-20.0%</td> </tr> <tr> <td>2020E</td> <td>-5</td> <td>0.0%</td> </tr> </tbody> </table>	Year	EBIT adj (M USD)	EBIT margin (%)	2015	-35	-250.0%	2016	-45	-200.0%	2017	-35	-100.0%	2018E	-22	-50.0%	2019E	-15	-20.0%	2020E	-5	0.0%
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<b>Conflict of interests</b> <b>Dennis Berggren owns shares in the company : No</b>  Redeye performs/have performed services for the Company and receives/have received compensation from the Company in connection with this.	<b>Company description</b> Heliospectra specializes in intelligent lighting systems for plant research, greenhouse cultivation and controlled environment agriculture. The company is a global leader in LED grow lights for advanced research applications and has patented technology.																																										



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**Redeye Rating (2018-04-28)**

Rating	Management	Ownership	Profit outlook	Profitability	Financial Strength
7,5p - 10,0p	46	43	18	10	20
3,5p - 7,0p	77	70	105	34	48
0,0p - 3,0p	12	22	12	91	67
Company N	135	135	135	135	135

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