CLAIMS:

1. A solar panel tower, the tower comprising:

a first level of one or more bifacial solar panels arranged to form one or more sides of a first polygon around a longitudinal axis, wherein a first face of each of the first level of bifacial solar panels forms one side of the first polygon; and

a second level of bifacial solar panels arranged to form one or more sides of a second polygon around the longitudinal axis, wherein a first face of each of the second level of bifacial solar panels forms one side of the second polygon.

2. The solar panel tower of claim 1, wherein the first polygon has a number of sides equal to or greater than a number of sides of the second polygon.

3. The solar panel tower of claim 1, wherein the second polygon has a number of sides equal to or less than a number of sides of the first polygon.

4. The solar panel tower of claim 1, further comprising a third level of bifacial solar panels arranged to form one or more sides of a third polygon around the longitudinal axis from the first or second level of bifacial solar panels, wherein a first face of each of the third level of bifacial solar panels forms one side of the third polygon.

5. The solar panel tower of any one of claims 1 to 4, wherein the number of bifacial solar panels in the first level is equal to the number of sides of the first polygon.

6. The solar panel tower of any one of claims 1 to 5, wherein the number of bifacial solar panels in the second level is equal to the number of sides of the second polygon.

7. The solar panel tower of claim 4, wherein the number of bifacial solar panels in the third level is equal to the number of sides of the third polygon.

8. The solar panel tower of any one of claims 1 to 7, wherein the longitudinal axis is substantially vertical.

9. The solar panel tower of any one of claims 1 to 8, further comprising one or more mirrors configured to reflect sunlight on to one or more of the bifacial solar panels.

10. The solar panel tower of any one of claims 1 to 9, further comprising a support structure connected to the bifacial solar panels and supporting the bifacial solar panels in the tower.

11. The solar panel tower of any one of claims 1 to 10, wherein the support structure is configured to tilt one or more bifacial solar panels relative to the longitudinal axis.

12. The solar panel tower of any one of claims 1 to 11, wherein two or more of the bifacial solar panels are electrically connected in series.

13. The solar panel tower of any one of claims 1 to 11, wherein two or more of the bifacial solar panels are electrically connected in parallel.

14. The solar panel tower of any one of claims 1 to 13, wherein the electrical output is connected to a load.

15. A solar tower array comprising two or more solar panel towers, each according to any one of claims 1 to 14.