In 2022, ICRP took a significant step forward in several areas, making it one of our busiest years to date in our now 95 years of existence. Following the success of our digital Workshop on “Future of Radiological Protection” in October 2021 with as much as 1500 registrations from about 100 countries, we understood that such digital formats would provide us a promising opportunity to engage with our stakeholders. Consequently, with the Review and the Revision of the System of Radiological Protection in full swing and our body of ongoing work more demanding than ever, we have developed a series of digital events that continue to grow in frequency and functionality.

As a new feature, we introduced a flexible fee structure, ensuring that anyone around the world can register and attend these events at no cost. For those able to contribute at varying levels, however, their support directly impacts our ability to keep our program of work progressing and accessible. Whether it is putting on an online event at the beginning of a new Task Group, a webinar to present published results, or a workshop during the consultation period of a report, these events are all designed to support participation, inclusion, and transparency.

As we work towards the next set of general recommendations that will guide radiological protection for the decades to come, these digital events will play a critical role to ensure those recommendations remain fit for purpose.

Digital events also allow us to be more prudent with our carbon footprint. We have ambitious goals that will require more meetings, with more colleagues and more organisations than ever before. Wherever possible, we are committed to minimising our impact on the environment – one of the various options we have to support the sustainable development of our planet as laid down in the Sustainable Development Goals formulated by the United Nations.

Nevertheless, face-to-face meetings did take place in 2022, including our flagship event, the ICRP 2021+1 Symposium in Vancouver, British Columbia. About 500 experts from over 40 countries gathered in Canada to discuss “Radiological Protection - The Next Generation”. Here, we announced the Vancouver Call for Action that is set to encourage funding organisations, research institutions, and universities in their efforts to strengthen expertise in radiological protection worldwide. A special thank you to the Canadian Nuclear Safety Commission (CNSC), Health Canada, and the Canadian Radiation Protection Association (CRPA) for their partnership, collaboration, and support during ICRP 2021+1.

In November of 2023, I am looking forward to welcoming the radiological protection community from around the world to Tokyo, Japan, for ICRP 2023. With our co-host the National Institutes for Quantum Sciences and Technology (QST), special partners at the Japanese Radiation Research Society (JRRS), Japan Health Physics Society (JHPS), and several other local Japanese organisations, we’re excited to present an attractive programme with unprecedented engagement.

Werner Rühm  
ICRP Chair
Membership

NORTH AMERICA
75 MEMBERS 7 MENTEES

EUROPE
165 MEMBERS 12 MENTEES

ASIA
59 MEMBERS 11 MENTEES

AFRICA
6 MEMBERS 1 MENTEE

SOUTH AMERICA
7 MEMBERS 1 MENTEE

OCEANIA
9 MEMBERS 3 MENTEES

TOTAL: 356 (AS OF 31 DECEMBER 2022)
Mentees are also members, but counted separately here to highlight them.

2022 Mentees

TG 99
Katherine Raines

TG 105
Megan Cook

TG 110
Anthony Davila

TG 111
Stephen Barnard
Andreas Breitbarth
Sasha Jande
Julie Leblanc
Weiwei Pei
Prabal Subedi

TG 113
Yumi Lee
Wyatt Smither

TG 114
Momo Takada

TG 116
Abdullah Abuhaimeed
Buthaina Al Ameri
Zakiya Al Rahbi
Abdel-Hai Benali

TG 116
Ana Cravo Sá
Mario Djukelic
Sebastien Gros
Anja Lazovic
Aliaksandr Miadzvetski
Francisco Sánchez
Maria Cristine Plazas d’Leon
Yiannis Roussakis
Hossam Ragab Shaaban
Snezana Vostinic

TG 119
Suryakanta Acharya
Juancong Dong
Yumi Saigusa
Bhanu Prasad Venkatesulu

TG 121
Aidana Amrenova
Ámilie Louize Degenhardt-Erbe
Sara Dumit
Liudmila Liutsko
Shayen Sreetharan
On the first of January, the free-to-access library of ICRP publications was extended to the 2020 issues of *Annals of the ICRP*: Publication 143 Paediatric Computational Reference Phantoms, Publication 144 Dose Coefficients for External Exposures to Environmental Sources, Publication 145 Adult Mesh-type Reference Computational Phantoms, Publication 146 Radiological Protection of People and the Environment in the Event of a Large Nuclear Accident, and the Proceedings of the Fifth International Symposium on the System of Radiological Protection.

Most activities in 2022 were related to the review and revision of the System of Radiological Protection launched mid-2021. This included publishing the open access paper ‘Summary of the 2021 ICRP Workshop on the Future of Radiological Protection’ (Rühm et al., 2022), outlining results from the first major opportunity for the RP community to provide input into the process.

In October, ICRP organised a Workshop on the Future of Radiological Protection during the European Radiation Protection Week in Estoril, Portugal, specifically to gather feedback on the open-access paper ‘Areas of Research to Support the System of Radiological Protection’ (Laurier et al., 2021).

Most notably, the 6th International Symposium on the System of Radiological Protection, which had been postponed due to pandemic travel restrictions, was renamed ICRP 2021+1 and held in Vancouver, Canada in November 2022. Under the overarching theme ‘Radiological Protection – The Next Generation’, the event attracted about 500 in-person participants from over 40 countries, with more joining remotely. Full details of the programme are available on the ICRP website, including recordings of the sessions, and proceedings will be published soon.

During ICRP 2021+1, ICRP Chair Werner Rühm announced the ‘Vancouver Call for Action to Strengthen Expertise in RP Worldwide’ (Rühm et al., 2023), details of which were published in early 2023.

Reflecting ICRP’s aim to be as transparent and accessible as possible, nine additional open events were held during the year: six online, one hybrid, and two in-person. Information is available on the ICRP website, including all available recordings.

Reflecting global concern and uncertainty, in May ICRP issued a Statement on the Conflict in Ukraine noting ICRP’s mission to continue to work world-wide to protect people and the environment. In August, ICRP Publication 146 Radiological Protection of People and the Environment in the Event of a Large Nuclear Accident was made free to access earlier than scheduled. Two months later, the mandate of Task Group 120 on radiation emergencies was extended to include nuclear detonations of limited size, and ‘Advice for the Public on Protection in Case of a Nuclear Detonation’ was released online in more than a dozen languages.
2022 Events

Recordings for most events available at www.ICRP.org

TG 118 WORKSHOP EXPLORING RBE
PART ONE
16 MARCH 2022

TG 118 WORKSHOP EXPLORING RBE
PART TWO
17 MAY 2022

Effects of Ionising Radiation Exposure in Offspring and Next Generations
Budapest, Hungary
31 MAY - 2 JUNE 2022

ERPW/ICRP Workshop on the Future of RP
ERPW 2022
Estoril, Portugal
10 OCT 2022

ICRP-IRPA Virtual Workshop
Application of the Concepts of Tolerability and Reasonableness in the Medical Field
20-21 JUNE 2022

Introducing ICRP Publication 152
RADIATION DETRIMENT CALCULATION METHODOLOGY
9 DECEMBER 2022

Radiological Protection of the Patient in Radiation Oncology
Current Challenges and the Future
Abu Dhabi, United Arab Emirates
13-15 DECEMBER 2022
ICRP is actively involved world-wide, engaging with many organisations and individuals with an interest in radiological protection. In 2022, this included, for example:

Participation in two International Radiation Protection Association (IRPA) Regional Congresses, the 1st North American IRPA Regional Congress, held in St, Louis, Missouri, USA, and the 6th European IRPA Regional Congress, held in Budapest, Hungary

Lecture at the NEA International Radiation Protection School (Sweden)

Participation in the International Advanced Training Course organised by Nagasaki University Research and Support Centre for the Future of Fukushima (Japan)

Co-organisation with the UAE Federal Authority for Nuclear Regulation and Cleveland Clinic Abu Dhabi of the training course Radiological Protection of the Patient in Radiation Oncology: Current Challenges and the Future (UAE)

Participation in meetings of:
- IAEA Radiation Safety Standards Committee (Vienna)
- Inter-Agency Committee on Radiation Safety
- NEA Committee on Radiological Protection and Public Health (France)
- United Nations Scientific Committee on the Effects of Atomic Radiation (Vienna)
- World Nuclear Association Radiation Protection Working Group

ABOVE: Thierry Schneider, ICRP Main Commission Member and Committee 4 Chair, speaks at the IAEA International Conference on Occupational Radiation Protection in Switzerland in September 2022.

LEFT: ICRP members, including Scientific Secretary and CEO Christopher Clement, join colleagues in the UAE for the Radiological Protection of the Patient in Radiation Oncology: Current Challenges and the Future workshop in December 2022.
Global Engagement

Presentations at:

- Canadian Nuclear Association Annual Meeting (Canada)
- Federal/Provincial/Territorial Radiation Protection Committee meeting (Canada)
- Health Physics Society Annual Meeting (USA)
- IAEA International Conference on Occupational Radiation Protection (Switzerland)
- Interagency Steering Committee on Radiation Standards (USA)
- 7th International Conference on Radiation Medicine (Saudi Arabia)
- IUPESM World Congress on Medical Physics and Biomedical Engineering (Singapore)
- 1st North American IRPA Regional Congress, hosted by the US Health Physics Society (USA)
- North Central Chapter of the Health Physics Society Spring Technical Meeting (USA)

BELOW: In June 2022, Christopher Clement, ICRP Scientific Secretary and CEO, presents on the Review and Revision of the System of Radiological Protection at the 52nd Meeting of the IAEA Radiation Safety Standards Committee in Vienna, Austria.
In 2021, more than a decade since the current (2007) General Recommendations were released, ICRP launched a review and revision of the System of Radiological Protection to ensure it continues be fit for purpose, protecting people, animals, and the environment for the next generation. This was announced through two open access papers, and an opportunity for the RP community to provide feedback:

**Keeping the ICRP Recommendations Fit for Purpose**  
(Clement et al., 2021)  
*Journal of Radiological Protection*

**Areas of Research to Support the System of Radiological Protection**  
(Laurier et al., 2021)  
*Radiation and Environmental Biophysics*

**Digital Workshop on the Future of Radiological Protection**  
2021
In 2022, this was followed by a paper summarising the views from the Digital Workshop, another workshop to gather feedback on the ‘Areas of Research Paper’ (in conjunction with European RP Week in Portugal), and, most notably ICRP2021+, ICRP’s 6th International Symposium on the System of Radiological Protection.

Having identified elements of the System to be reviewed, several Task Groups were initiated during the year:

- **TASK GROUP 122**
  Update of Detriment Calculation for Cancer

- **TASK GROUP 123**
  Classification of Harmful Radiation-induced Effects on Human Health for RP Purposes

- **TASK GROUP 124**
  Application of the Principle of Justification

- **TASK GROUP 125**
  Ecosystem Services in Environmental RP

- **TASK GROUP 126**
  Radiological Protection in Human Biomedical Research

- **TASK GROUP 127**
  Exposure Situations and Categories of Exposure
Although delayed by a year due to the COVID-19 pandemic, the 6th International Symposium on the System of Radiological Protection brought together experts from across the globe to meet on the shores of Vancouver, Canada.

RIGHT: Bob MacDonald gives his keynote speech titled The Future is Now: Solving the Climate Crisis with Existing Technology.

BELOW: Werner Rühm, Chair of the ICRP Main Commission, presents Haruyuki Ogino of Japan with the 2021 Bo Lindell Medal for the Promotion of Radiological Protection during the opening session.
ICRP 2021+1 consisted of four days of programming with the overarching theme Radiological Protection - The Next Generation, which reflects the need to review and refine the System of Radiological Protection over the coming decade to ensure it remains fit for purpose for the next generation, and highlights the importance of innovation and involving the next generation of scientists and professionals in this pursuit.

Event Statistics

500 DELEGATES

from

40+ COUNTRIES

154 POSTERS

90 PRESENTATIONS

LEFT: Over 150 digital posters were presented at ICRP 2021+1, allowing attendees to access posters at any time from anywhere with their devices. All posters and live session recordings are available to view on www.icrp.org

BELOW: Gary Abbott of the White Thunder Dance Theatre performs a hoop dance during the ICRP 2021+1 Awards Gala.
The objective of the System is to contribute to an appropriate level of protection for people and the environment against the harmful effects of ionising radiation exposure without unduly limiting the individual or societal benefits of activities involving radiation.

ICRP develops the System for the public benefit. It is based on the latest science, social and ethical values, and over a century of experience since the discovery of ionising radiation.

The System is the basis of standards, regulations, guidance, programmes, and practice worldwide. It is used by intergovernmental and nongovernmental advisory and standard setting agencies; regulatory authorities; educational, scientific, and healthcare institutions; operators; individual professionals; and others with an interest in radiological protection.
At ICRP2021* in Vancouver, ICRP Chair Werner Rühm announced the Vancouver Call for Action to Strengthen Expertise in Radiological Protection Worldwide, to address concerns that a shortage of investment in training, education, research, and infrastructure will compromise society’s ability to manage radiation risks. This could lead to unjustified exposure to or unwarranted fear of radiation, impacting physical, mental, and social well-being. It could also unduly limit the potential for research and development in new radiation technologies (for example, in healthcare, energy, and the environment) for beneficial purposes. ICRP calls for action to strengthen expertise in radiological protection worldwide through:

- National governments and funding agencies strengthening resources for radiological protection research allocated by governments and international organisations.
- National research laboratories and other institutions launching and sustaining long-term research programmes.
- Universities developing undergraduate and graduate university programmes and making students aware of job opportunities in radiation-related fields.
- Using plain language when interacting with the public and decision makers about radiological protection.
- Fostering general awareness of proper uses of radiation and radiological protection through education and training of information multipliers.

This will be addressed at ICRP 2023 in Tokyo, Japan.
Originally established at the Second International Congress of Radiology in 1928 as the International X-ray and Radium Protection Committee, today ICRP is an independent international charity registered in the UK, relying on financial contributions and support from governments, industry, agencies, foundations, and individuals from around the world.

ICRP consists of the Main Commission, the Scientific Secretariat, four standing Committees, and Task Groups established as needed to undertake specific work. Members come from over 40 countries and all disciplines relevant to radiological protection. They are invited to join ICRP as independent experts on a volunteer basis for four-year terms. Representatives of organisations in formal relations with ICRP are regularly invited to both advise the Main Commission and to participate in meetings of the Committees. Individuals from these organisations may be invited to be members of Task Groups or to review drafts of work in progress where their expertise is particularly relevant.

This structure supports a rigorous system of peer review. The work of Task Groups is reviewed by the relevant Committee(s), and then reviewed and approved by the Main Commission. During development, most reports are circulated to several organisations and individual experts for critical review and all are posted for public consultation through the ICRP website.
The Main Commission consists of the Chair and up to twelve other members. The Main Commission is the governing body, setting the policy and programme of work, and approving all official publications.

Werner Rühm  
Chair

Donald Cool  
Vice-Chair

Dominique Laurier  
Committee 1 Chair

François Bochud  
Committee 2 Chair

Kimberly Applegate  
Committee 3 Chair

Thierry Schneider  
Committee 4 Chair

Simon Bouffler  
Member

Kun Woo Cho  
Member

Gillian Hirth  
Member

Michiaki Kai  
Member

Senlin Liu  
Member

Sergey Romanov  
Member

Andrzej Wojcik  
Member
Scientific Secretariat

The Scientific Secretariat manages the daily business of ICRP. The core group is based in Ottawa, Canada.

Christopher Clement
Scientific Secretary & CEO
Editor-in-Chief of Annals of the ICRP

Takashi Yasumune
Assistant Scientific Secretary
Associate Editor of Annals of the ICRP

Hyungjoon Yu
Assistant Scientific Secretary
Associate Editor of Annals of the ICRP

Lynn Lemaire
Executive Administrator

Kelsey Cloutier
Head of Stakeholder Engagement and Communications

Charlotte White
Brand and Digital Media Specialist
Scientific Secretariat

Other members work part-time from their home countries.

Suryakanta Acharya  
Technical Writer

Abdulkadir Alaydarous  
Technical Secretary

Barrington Brevitt  
Technical Writer

Adrienne Ethier  
Technical Secretary

Franklin Eze  
Technical Secretary

Luana Hafner  
Intern

Toshihiro Higuchi  
Historian

Camille Pacher  
Technical Secretary

Constantinos Zervides  
Technical Secretary

Boniface Kouamé Yao  
Technical Secretary
Committee 1: Effects

Considers the effects of radiation action from the subcellular to population and ecosystem levels, and assesses implications for protection of people and the environment.

Dominique Laurier Chair
Gayle Woloschak Vice-Chair
Elizabeth Ainsbury Secretary
Christelle Adam-Guillermin Preetha Rajaraman
Tamara Azizova David Richardson
Christophe Badie Yoshiya Shimada
Dimitry Bazyka Mikhail Sokolnikov
Agnès Francois Quanfu Sun
Michael Hauptmann Ludovic Vaillant
Manoor Prakash Hande Richard Wakeford
Kotaro Ozasa Luana Hafner

Committee 2: Dose

Develops dosimetric methodology for the assessment of internal and external radiation exposures for use in the protection of people and the environment.

François Bochud Chair
Francois Paquet Vice-Chair
Maria Antonia Lopez Secretary
Martin Andersson Choonsik Lee
Volodymyr Berkovskyy Junli Li
Denison de Souza Santos James W. Marsh
Augusto Giussani Nina Petoussi-Henss
Derek Jokisch Tatsuhiko Sato
Chan Hyeong Kim Tracy Smith
Mukund Shrinivas Kulkarni Alexander Ulanowski
Stephanie Lamart

READ NOW 2022 CI Meeting Summary

READ NOW 2022 C2 Meeting Summary
Committee 3: Medicine
Addresses protection of persons and unborn children when ionising radiation is used in medical diagnosis, therapy, and biomedical research, as well as protection in veterinary medicine

Kimberly Applegate  Chair
Colin Martin  Vice-Chair
David Sutton  Secretary
Marie-Claire Cantone  Jin Chul Paeng
John Damilakis  Claudia E. Ruebe
Makoto Hosono  William Small
Aurélie Isambert  Aste Sovik
Mika Kortesniemi  Isabelle Thierry-Chef
Mahadevappa Mahesh  Ivan Williams
Josep M Martí-Climent  Weihai Zhuo

Committee 4: Application
Provides advice on the application of the Commission’s recommendations for the protection of people and the environment in an integrated manner for all exposure situations

Thierry Schneider  Chair
Nicole Martinez  Vice-Chair
Jacqueline Garnier-Laplace  Secretary
Min Baek  Yahong Mao
Nobuhiko Ban  Andy Mayall
Yann Billarand  Anne Nisbet
Julie Burtt  Sergey Shinkarev
Analia Canoba  John Takala
Eduardo Gallego  Hiroko Yoshida
Daniele Giuffrida  Friedo Zölzer
Catrin Baureus Koch
Most of the work of ICRP, in particular the development of reports to be published in Annals of the ICRP, is done by Task Groups. Often, a Task Group is established to develop a single publication, although some develop multiple publications. On occasion, a Task Group is established for other purposes, such as to prepare advice to the ICRP Main Commission.

In 2022, ICRP established six new task groups that address the following topics: updating detriment calculations for cancer (TG 122); reviewing how harmful radiation effects are classified (TG 123); application of justification in exposure situations (TG 124); how ecosystem services can be incorporated into radiological protection of the environment (TG 125); radiological protection in human biomedical research (TG 126); and categorising exposure situations (TG 127). Along with the 26 already active Task Groups and future Task Groups, they will contribute to the review and revision of the System of Radiological Protection.
Task Groups
Active as of 31 December 2022

TG 99
Reference Animals and Plants (RAPs) Monographs

TG 102
Detriment Calculation Methodology

TG 103
Mesh-type Reference Computational Phantoms (MRCP)

TG 105
Considering the Environment When Applying the System of RP

TG 106
RP for Activities Involving Mobile High Activity Sources

TG 108
Optimisation of RP in Digital Radiography, Fluoroscopy, and CT in Medical Imaging

TG 109
Ethics in RP for Medical Diagnosis and Treatment

TG 110
RP in Veterinary Practice

TG 111
Factors Governing the Individual Response of Humans to Ionising Radiation

Click on a task group to learn more about their work.
Task Groups

Active as of 31 December 2022

**TG 112**
Emergency Dosimetry

**TG 113**
Reference Organ and Effective Dose Coefficients for Common Diagnostic X-Ray Imaging Examinations

**TG 114**
Reasonableness and Tolerability in the System of RP

**TG 115**
Risk and Dose Assessment for RP of Astronauts

**TG 116**
RP Aspects of Imaging in Radiotherapy

**TG 117**
RP in PET and PET/CT

**TG 118**
Relative Biological Effectiveness (RBE), Quality Factor (Q), and Radiation Weighting Factor (wR)

**TG 119**
Effects of Ionising Radiation on Diseases of the Circulatory System and Their Consideration in the System of RP

**TG 120**
RP for Radiation Emergencies and Malicious Events
In 2022, ICRP prioritised sustainability, a key feature of the Vancouver Call for Action, by starting to assess its own carbon footprint, the vast majority of which is due to travel for international meetings. Although some in-person meetings remain important and will continue, online meetings are now preferred. In 2022, approximately two-thirds of all ICRP Main Commission, Committee and Task Group meetings were held online.
The journal Annals of the ICRP is the authoritative source for recommendations and guidance of the International Commission on Radiological Protection. It was established in 1977 and is published by SAGE UK.

Thanks to the many organisations and individuals that supported the Free The Annals initiative on the occasion of ICRP’s 90th anniversary in 2018, two years after publication all issues are free to download. The latest issues are available by subscription or can be purchased individually from SAGE.

Publication 151
Occupational Intakes of Radionuclides: Part 5

Recommended citation

Authors on behalf of ICRP

Publication 152
Radiation Detriment Calculation Methodology

Recommended citation

Authors on behalf of ICRP
E. Cléro, L. Vaillant, W. Zhang, N. Hamada, D. Preston, D. Laurier, N. Ban
ICRP Mentorships

ICRP’s mentorship programme engages university students and early-career professionals and scientists as mentees in ICRP Task Groups with the guidance of an ICRP member as mentor. Mentees may come from educational, governmental, private, or any other organisation. This is a part-time voluntary arrangement, with mentees continuing to work at their home organisation most of the time. Every mentee has a specific task or role, making an important contribution to the work of the Task Group.

“My experience in the ICRP Mentorship Programme has been incredibly rewarding, as I’m having the unique opportunity to learn from and collaborate with Radiation Protection experts from around the world! I’m honored to be a mentee of ICRP Task Group 121 and truly grateful to serve our scientific community!”

_Sara Dumit, TG 121 Mentee_

“It’s given me a new point of view on radiation protection, in particular seeing the different ways that experts and authorities work across the globe to achieve that shared goal – it’s been like stepping into a whole new world!”

_David Sibenaler, TG 120 Mentee_

“The ICRP mentorship programme is a wonderful opportunity to gain experience by working with excellent specialists in their field. This opportunity for direct contact, the chance to ask questions and benefit from their wealth of experience are, in my opinion, the most important, as they allow you to expand the horizons of your own research. It is also a great opportunity to work on something relevant in the radiation research community.”

_Piotr Pankowski, TG 116 Mentee_
The contributions from these organisations allow ICRP to further our programme of work, paving the way for the advancement of the System of Radiological Protection globally. Want to join this growing list of organisations at the forefront of radiological protection? Contact us.
ICRP maintains formal relations with other organisations with an interest in radiological protection through specific agreements, or by granting Special Liaison status to organisations whose work is relevant to ICRP’s mandate. Organisations in formal relations with ICRP in 2022 are shown below.
## Finances

### INCOMING RESOURCES

<table>
<thead>
<tr>
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<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
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<tbody>
<tr>
<td>Contributions Received</td>
<td>1,017,495</td>
<td>761,044</td>
<td>864,963</td>
<td>844,415</td>
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<tr>
<td>Royalties</td>
<td>124,153</td>
<td>189,793</td>
<td>226,562</td>
<td>149,461</td>
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<tr>
<td>Other</td>
<td>0</td>
<td>86,143</td>
<td>111,500</td>
<td>6,622</td>
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<tr>
<td>Total Incoming Resources</td>
<td>1,141,648</td>
<td>1,036,980</td>
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### RESOURCES EXPENDED

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<th>2019</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
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<tbody>
<tr>
<td>Promotion of Radiological Protection</td>
<td>781,865</td>
<td>315,982</td>
<td>379,066</td>
<td>614,023</td>
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<td>Governance Costs</td>
<td>494,158</td>
<td>438,986</td>
<td>482,716</td>
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<td>Other Resources Expended</td>
<td>34,531</td>
<td>4,744</td>
<td>52,326</td>
<td>17,200</td>
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<tr>
<td>Total Resources Expended</td>
<td>1,310,554</td>
<td>759,712</td>
<td>914,108</td>
<td>1,110,665</td>
</tr>
</tbody>
</table>

### Net Gains/(Losses) on Investments

- 2019: 0
- 2020: 3,136
- 2021: 16,671
- 2022: (35,118)

### NET MOVEMENT IN RESOURCES

- 2019: (168,906)
- 2020: 280,404
- 2021: 305,588
- 2022: (145,285)

### TOTAL FUNDS CARRIED FORWARD

- 2019: 490,407
- 2020: 770,811
- 2021: 1,076,399
- 2022: 931,114